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SOME RAMIFICATIONS OF COMPENSATION LIMITATIONS IN PERSONAL SERVICES CONTRACTS FOR DIRECT HEALTH CARE PROVIDERS

by

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The purpose of this study was to examine the effects of price restrictions in personal services contracts for direct health care providers. This is a unique method of contracting designed specifically to facilitate the hiring of highly specialized health care providers, primarily physicians, that typically demand a high rate of compensation than that generally offered by the services.

Legislation that authorized increased use of such contracts for health care services simultaneously mandated wage ceilings. Some economic impacts of wage ceilings in labor markets are presented. Shortages and a loss of military surplus are likely to be associated with wage ceilings. Recent data concerning personal services contracts are presented and examined. the result of the data evaluation provides some surprizes. First, many personal services contracts are not being utilized as originally intended. In fact very few are actually used for physicians' services. Second, there is an appearance of impropriety in some of these contracts.

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Some Ramifications of Compensation
Limitations in Personal Services Contracts
For Direct Health Care Providers

by

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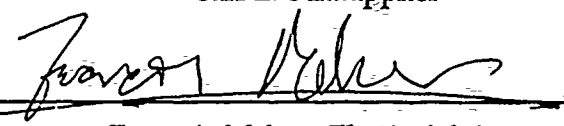
Approved by: 

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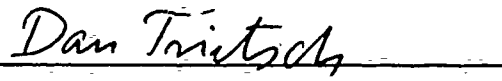

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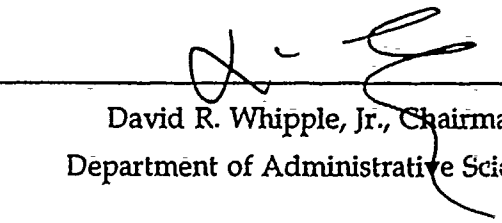

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ABSTRACT

The purpose of this study was to examine the effects of price restrictions in personal services contracts for direct health care providers. This is a unique method of contracting designed specifically to facilitate the hiring of highly specialized health care providers, primarily physicians, that typically demand a higher rate of compensation than that generally offered by the services.

Legislation that authorized increased use of such contracts for health care services simultaneously mandated wage ceilings. Some economic impacts of wage ceilings in labor markets are presented. Shortages and/or possible quality problems are likely to be associated with wage ceilings. Recent data concerning personal services contracts are presented and examined. The result of the data evaluation provides some surprises. First, many personal services contracts are not being utilized as originally intended. In fact very few are actually used for physicians' services. Second, there is an appearance of impropriety in the administration of some of these contracts.

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I. INTRODUCTION

A. BACKGROUND INFORMATION

Since 1986 the Department of Defense has used personal services contracts for direct health care providers when in-house sources of providers were insufficient to support the medical mission of the military departments. While the ambiguity of the medical mission tends to blur the focus of any policy review of these unique contracts, this thesis examines some economic ramifications of personal services contracts.

Personal services contracts are unusual and should not be confused with other types of service contracts. Specific authority for these contracts is contained in Title 10, of the United States Code.

Personal services contracts enable the Navy to contract with groups or individuals to provide services at military medical treatment facilities. These contracts make the contractor appear, and perform, essentially as a government employee. Other service contracts do not have this same employee-employer relationship. The rationale for personal services contracts is described later in this chapter.

Personal services contracts were originally meant to support the medical mission by maximizing beneficiary access

to Military Medical Treatment Facilities, maintaining readiness, reducing the use of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), and enhancing the quality of care by promoting the continuity of patient/provider relationships. The Navy currently appears to have somewhat ambiguous and ill defined goals with respect to the medical mission. A more well defined, measurable, and direct mission for the military medical department could possibly reduce the requirement for these types of contracts. (See the discussion in Melese [1990] for example.)

This chapter will examine federal contracting policy, the origins of the legislation which allow for personal services contracts, and the Contracting Officer's responsibility in overseeing personal service contracts. The chapter will also describe general provisions of service contracts and personal services contracts as prescribed by part 37 of the Federal Acquisition Regulation (FAR). An emphasis is placed on differentiating between personal and nonpersonal service contracts. Idiosyncracies specific to personal direct health care services are discussed. Finally, this chapter includes a brief description of a new alternative, namely Nonpersonal services contracts for direct health care providers.

B. FEDERAL POLICY

The policy of the federal government is to rely on the private sector for common commercial services.[1] This, of course, does not include performance of inherently governmental functions, nor does it require contracts for functions where government performance is practicable and more cost effective.

Under general contracting authority, nonpersonal services contracts are appropriate. Examples of nonpersonal services contracts include housekeeping services, grounds maintenance, security services, food service, or any other common commercial service that would not require the government to directly supervise the contract employee. In contrast, personal services contracts require a specific authorization and are not awarded unless that authorization is granted.

Currently the Department of Defense FAR Supplement contains guidance for two types of personal services which can be obtained by contract.[2]

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[1]The Office of Management and Budget (OMB) reaffirmed Federal policy concerning commercial activities when OMB Circular A-76 was signed in 1983. The policy stresses competition between the government and the private sector.

[2]The Federal Acquisition Regulation prohibits Personal services contracts. The only exceptions are for the services of "individual experts or consultants" and "direct health care providers".

1. Origin of Legislation

The Department of Defense Authorization Act, 1984, provided the authority for increased use of contract health care providers. A new section was added to chapter 55 of title 10, United States Code. This new section, sec. 1091, authorized the Secretary of Defense to contract with persons for services, including personal services, for the provision of direct health care services. In addition this section restricts the rate of compensation the Secretary can pay for these contracts. This rate may not exceed the rate of basic pay and allowances authorized by Chapters 3 and 7 of Title 37 for a commissioned officer in pay grade O-6 with 26 or more years of service. This wage restriction operates as a price ceiling. The economic effect of a binding wage ceiling in the labor market is for less labor to be supplied than is desired at the restricted wage. This excess of demand over supply typically results in labor shortages. This effect will be considered in Chapter II.

The section (1091) also repealed two sections of Title 10. Sections 4022 and 9022 provided the Army and Air Force authority to enter into contracts with civilian physicians to provide non-personal services in military medical treatment facilities. These sections were originally intended to help those services during times of emergency. However, compensation offered in these non-personal service contracts was very low. For example, the maximum pay rate for a

contract physician under these sections was limited to the pay of an Army or Air Force captain with over four but less than six years of service. Needless to say, these sections were so restrictive that they went unused.

The original language which set the current compensation restrictions was contained in a Senate Report from the Committee on Armed Services. Mr. Tower's committee recommended a provision requested by the Defense Department which resulted in the new section in Title 10.

The committee was very concerned about the Services' ability to acquire the personal services of physicians, noting that only a few types of health services, such as radiology and pathology, are subject to procurement by non-personal services contracts. But, interestingly, relatively few of today's personal services contracts for direct health care providers are for physicians.

Another major concern of the committee was the issue of adequate compensation. The provision recommended by the committee would,

> "make the salary of a contract health care provider negotiable depending upon the skills of the individual and the needs of the military services for those skills up to the sum of the basic pay, basic allowance for subsistence, and the basic allowance for quarters of an O-6 with over 26 years of service. In implementing this provision, the Committee expects the maximum allowable salary to be used sparingly."

2. Contracting Officer Responsibilities

The Contracting Officer is responsible for ensuring that a proposed contract for services is proper. To do this he must determine if the contract is for personal or nonpersonal services. If necessary, he should have the contract reviewed by the office of Counsel. If he determines that the appropriate contract is for personal services he must keep the file well documented to support his determination. This documentation may include the concurring opinion of legal counsel, letters or memos containing facts and rationale in support of his determination, and any other additional documentation the contracting agency may require.

C. CONTRACT TYPES

1. Service Contracts

General policy and procedures for the procurement of services by contract are prescribed in part 37 of the Federal Acquisition Regulation. The FAR distinguishes between contracts for personal services and contracts for nonpersonal services.

A "Service Contract" is a contract that directly engages the time and effort of a contractor whose primary purpose is to perform an identifiable task rather than to furnish an end item of supply. Service contracts can be one of two types. First, the "Personal Services Contract" is a contract that, by it's express terms or as administered, makes

contractor personnel appear, in effect, as government employees. Second, the "Nonpersonal Services Contract" is a contract under which the personnel rendering the services are not subject, either by the contract's terms or by the manner of it's administration, to the supervision and control usually prevailing in the relationships between the government and it's employees.

2. Personal Services Contracts

The government is normally required to obtain its employees by direct hire under competitive appointment or other procedures required by the civil service laws. As indicated in the FAR, a personal services contract is characterized by the employer-employee relationship it creates between the government and the contractor's personnel. Personal services contracts circumvent the civil service laws unless Congress has specifically authorized acquisition of the services by contract.

The characteristic employer-employee relationship occurs when the contractor's personnel are subject to relatively continuous supervision of a government officer or employee. This can result from either the terms of the contract as written or by the manner of its administration during performance. Ordering a specific article or service and reserving the right to reject the finished product or result, is not the type of supervision that converts a

contractor employee into a government employee. The determining factor is normally whether the government will exercise relatively continuous supervision and control over contractor personnel. Every proposed arrangement must be evaluated in light of its own facts and circumstances. It is advised to seek and document the opinion of legal counsel to support the contracting officer's final decision.

a. Assessing Contract Type

When making an assessment as to whether a contract for services is for personal or nonpersonal services, some basic descriptive elements should be used as a guide. The FAR provides a list of key elements which would tend to make the appropriate contract a personal services contract. Performance on site is characteristic of personal services contracts. Also, if the principle tools and equipment are provided by the government in the course of contract performance, a personal services contract is generally appropriate. Moreover, if (1) the services provided are applied directly to the integral effort of the agency in furtherance of its assigned mission, or if (2) comparable services, meeting the same type needs, are performed in the same agency using military or civil service personnel, a determination of the appropriateness of a personal services contract is likely. Another key element is the length of time the service will be needed. Personal services tend to be

required for periods in excess of one year. Finally, the question of government direction or supervision applies. Personal services contracts, by their inherent nature or by the manner provided, reasonably require direct or indirect government direction or supervision of contractor personnel.

3. Personal Direct Health Care Services

In part 237 (Service Contracting) of the DOD FAR Supplement, under subpart 237.1 (Service Contracts), there is a section 237.104 devoted to Personal Services Contracts. Under this section, subsection S-71 deals with acquisition of Personal Direct Health Care services. It sets policy and procedures for the acquisition by contract of the personal direct health care services from individuals or firms.

a. Definition

Direct health care services are those services provided by health care providers who participate in clinical patient care services. Examples would be Doctors, Nurses, Dentists, and various Therapists, Technologists, and Technicians. Not included are services provided by predominantly administrative or clerical personnel and personnel who provide maintenance or security services.

b. Justification

In the course of accomplishing the medical mission at major Military Medical Treatment Facilities, shortfalls in critical personnel areas are often observed. (Maze and

Longo,1989) These shortfalls can have pronounced effects in beneficiary access to military health care, causing increased use of CHAMPUS for our military dependant population. (Willis, 1989 and Navy Times, 1989) Also, these critical shortages can significantly damage our Graduate Medical Education Program.

(1) Graduate Medical Education. The Graduate Medical Education Program is considered an important component of medical readiness since it provides one way of retaining the best physicians possible. Few recognize that one of the strongest retainers of physicians in military medicine is the Graduate Medical Education Program. The military trains its own Physicians in their specialties. This advanced education includes four to five year residency training programs for these physicians, depending upon the specialty. The opportunity to have a Medical Residency in one of these programs keeps good doctors in the military by attaching a service requirement to the training. Military physicians compete for the limited number of residencies awarded each year. Once accepted to a program, the physician must then commit himself to serve on active duty for a specified period of time after completion of the residency training program.

Graduate Medical Education Programs are not inexpensive and require appropriate accreditation. For this accreditation the institution must be able to provide the wide range of clinical expertise necessary to support a complete

program. In other words, if a medical facility wants to provide a particular residency training program (i.e. an orthopaedic residency), they may be required to have the expertise of some very specific medical specialists (i.e. an orthopaedic oncologist) on hand at the facility.[3] These highly specialized physicians are needed not only for consultation, but also to ensure that a "wide enough" spectrum of patients is experienced by the physician in residency.

The scarcity of these highly specialized individuals (and thus the high wages they command) often leads to shortages. At times, the only recourse available for these critical personnel shortfalls is the personal services contract for direct health care providers.

(2) Examples. The Naval Hospital at San Diego, in order to retain it's Thoracic Surgery Residency training program, required the services of a Perfusionist - a specially trained Registered Nurse who is responsible for operating the machines which circulate and oxygenate a patient's blood during open heart surgery. There are no Navy billets for a nurse perfusionist and the Naval Hospital has no civil service

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[3]This is somewhat analogous to a "Union Shop". One might argue there is an analogy to a railroad union's demand for a brakeman on every train, even though technology has surpassed the requirement. It would seem logical to contract for a single doctor's visit when the patient's clinical condition warranted it, rather than to contract for even a part time physician whose services are only required as an input to produce physicians which satisfy the American Medical Association.

positions available for one. Yet the requirement is deemed critical to the mission of the Naval Hospital in San Diego.

This job, if performed by a contractor, by its inherent nature, requires constant, direct supervision of the contractor by a government employee, namely the surgeon. The need for the perfusionist's services is expected to last beyond one year and the performance of the service is on site. Each of these characteristics support a determination of "personal services" by the contracting officer.

Another case, not quite as obvious in its determination, required part time services of a pediatric endocrinologist to ensure accreditation of the Pediatric Residency Training Program. One might argue that pediatrics is not essential to the military mission, but without a viable Pediatric Residency Program both the General Surgery and Internal Medicine Residency Programs might lose accreditation.[4] Also, by gaining those services in-house, the Navy satisfies another apparent objective, namely reducing its use of CHAMPUS. The key elements in the determination of personal services in this case include the extent to which the government directs the contractor and retains control of the function involved. This case required the contractor to be answerable to the Chief of Pediatric Services for contract

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[4]Another possible example of the "union shop" at work.

performance, and thus also satisfied the criteria for a personal services contract.

c. Limitations

Care must be taken by the Contracting Officer to ensure that the acquisition of services by contract are in support of the medical mission and are meeting needs beyond the capabilities of in-house resources. In other words, the requirement must be greater than the capabilities of the Military Medical Treatment Facility when it is fully staffed. Contracts cannot be awarded to fill vacant civil service positions for example. Similarly, gapped military billets can not be filled with contractor personnel under personal services contracts.

There are some other limitations to personal services contracts for direct health care providers. As with other personal services contracts, preference shall not be given to former government employees. Moreover, prospective personal services contracts for direct health care providers must be approved in accordance with the department's own approval requirements.

d. Compensation

Compensation of contract health care providers is negotiable depending upon the skills of the prospective contractor. The government retains full personal responsibility for the function involved, therefore the

contractor is not required to furnish malpractice liability insurance. This can be a considerable factor when determining the contract price. In particular, the contractor can potentially gain a substantial savings by not having to furnish malpractice insurance.

Interestingly, this assumption of the risk on the government's part amounts to non-wage compensation provided to the contract health care provider. The actual amount of this indirect compensation varies with the contractor. Notably, health care providers with the highest malpractice insurance rates in effect receive the greatest overall compensation working for the military. Thus one might argue that less-talented, more risk prone health care providers would find it more attractive to contract with the military.

It has been previously stated that wage compensation is limited using the military pay scale as a guide. For instance, a personal services contract for one full time equivalent (FTE)[5] of a doctor can be priced up to the total earnings of a Navy Captain with over 26 years in service. Compensation rate includes basic pay, basic allowance for quarters, variable housing allowance, and basic allowance for subsistence. It does not include special or

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[5]One FTE (full time equivalent) is equal to the amount of work one would expect from a single, full time, employee. Full time for this purpose is 40 hours per week. A contract may be let for some amount less than one FTE, for example, 0.1 FTE would equate to a part time employee, or 4 hours per week.

incentive pays, hazardous duty pay, flight pay, professional pay, continuation pay, or any discretionary pay. Compensation must be within the limits of Table I on the following page.

TABLE I MAXIMUM AUTHORIZED COMPENSATION RATES

Occupation/Specialty Group	Compensation Rate Not to Exceed*	
	Pay Grade	Years of Service
Physicians and Dentists	O-6	over 26
Other individuals, including nurse practitioners, nurse anesthetists, and nurse midwives, but excluding paraprofessionals	O-5	over 20 but less than 22
All registered nurses, except those included in group II	O-4	over 16 but less than 18
Paraprofessionals	O-3	over 6 but less than 8

4. Nonpersonal Health Care Services

The FAR contains subpart 37.4 - Nonpersonal Health Care Services. The subpart prescribes policy and procedures for obtaining direct patient care services under the previously mentioned nonpersonal services contract. This contract type is discussed to provide a contrast with the personal services contract. The outcome of a nonpersonal service contract is similar, but the government does not exercise as much control over the contractor. Under these nonpersonal services contracts for direct health care

providers the government may evaluate the quality of professional and administrative services provided, but retains no control over the professional medical aspects of services rendered.

These contracts can be used in instances like the Primus Clinics and Navcare Clinic. The mission need in these instances is simply to increase access to the military medical system for eligible beneficiaries and reduce CHAMPUS costs.

In contrast to the case of personal services contracts, under nonpersonal services contracts, the contractor is required to seek his own insurance for malpractice. In such contracts for direct health care providers, the Contracting Officer must obtain evidence of insurability prior to the award of the contract and ensure that a Government indemnification clause is included in the contract.

D. CHAPTER SUMMARY

The justification for personal services contracts is captured in phrases such as "maximize beneficiary access" and "facilitate mission accomplishment." The ambiguity of the military medical mission may in itself create an artificial requirement for contract health care providers.

Various methods are available to obtain the health care services required to accomplish the stated medical mission. Both the Federal Acquisition Regulation and the Department of

Defense FAR Supplement recognize and address the unique needs of medical departments in procurement of services. The most important aspect of the process is the Contracting Officer's assessment. Therefore the terms of the proposed contract and the manner of execution must support the method used. To ensure the most for their money, the activities desiring the execution of personal services contracts in their facilities must work closely with the Contracting Officer to help determine the optimum contracting method and help to monitor the terms of the contract after the award is granted.

Higher risk health care providers , one would argue, would find it more attractive to contract with the military than their less risk prone counterparts. This is due to the government's assumption of risk in personal services contracts which amounts to non-wage compensation provided to the contract health care provider. Other things equal, health care providers with the highest malpractice insurance rates in effect receive the greatest overall compensation working for the military. Thus, on the margin, the military may be enticing more physicians with higher malpractice insurance rates to contract their services to the military.

II. ECONOMIC CONSIDERATIONS

A. THE MARKET FOR HEALTH CARE SERVICES

1. Supply of Health Care Services

The supply of any given health care service (for example physician's services) is determined by a variety of inputs. In the long run, changes in the actual number of individuals practicing in a given health care profession can effect the supply of labor in the market. For example, more medical school graduates and/or more medical schools, would each have the effect of increasing available supply.

In the short run, however, the supply of labor is affected most by changes in the real wage rate. A higher real wage encourages individuals to offer more of their labor services than a lower real wage rate (ceteris paribus). Each individual's labor supply curve is thus typically upward sloping[6] and the sum of these individual supply curves make up the market supply of labor curve. (Nicholson, 1987) Thus the supply of labor in a given market (for nurses, physicians,

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[6]Marshall (1938) cites a case of a regressive or backward sloping supply curve which is based on the assumption that once income has reached some given level, the desire for leisure prevails over the desire for income, so that at very high levels of wages, less effort will be exerted than at lower levels. This is viewed here as the exception rather than the rule.

dentists, etc.) will tend to slope up and to the right as in Figure 1.

2. **Demand for Health Care Services**

Health care services are inputs to the provision of health care and are demanded in a wide range of settings. Public health services, education, non-profit organizations, the media, the military, and the health care industry to name a few.

To study the demand for these inputs, and how that demand might change with wage changes, one needs to look at the marginal revenue product of labor (MRP_L).

$$MRP_L = MP_L \cdot MR$$

The marginal revenue product of labor (MRP_L) is the product of the marginal physical productivity of labor (MP_L) and marginal revenue (MR). The marginal physical product of labor is the additional output that one more employee can generate for an employer. In the case of health care services this may measure, for example, how many additional surgical procedures a physician can perform. Once this output measure has been generated, the revenue produced by an additional unit of output is measured and multiplied by the MP_L to yield the marginal revenue product of labor. A profit-maximizing employer would tend to hire labor services at the point where $MRP_L = W$. If $MRP_L > W$ then the employer can still profit by

hiring more labor (and thus providing more health services) since the last unit of labor increases earnings (MRP_L) by more than that labor requires to work for the employer (W). Alternatively, if $MRP_L < W$, then the employer lost money on the last unit of labor hired. Thus employers "demand" labor at the point where $MRP_L = W$.

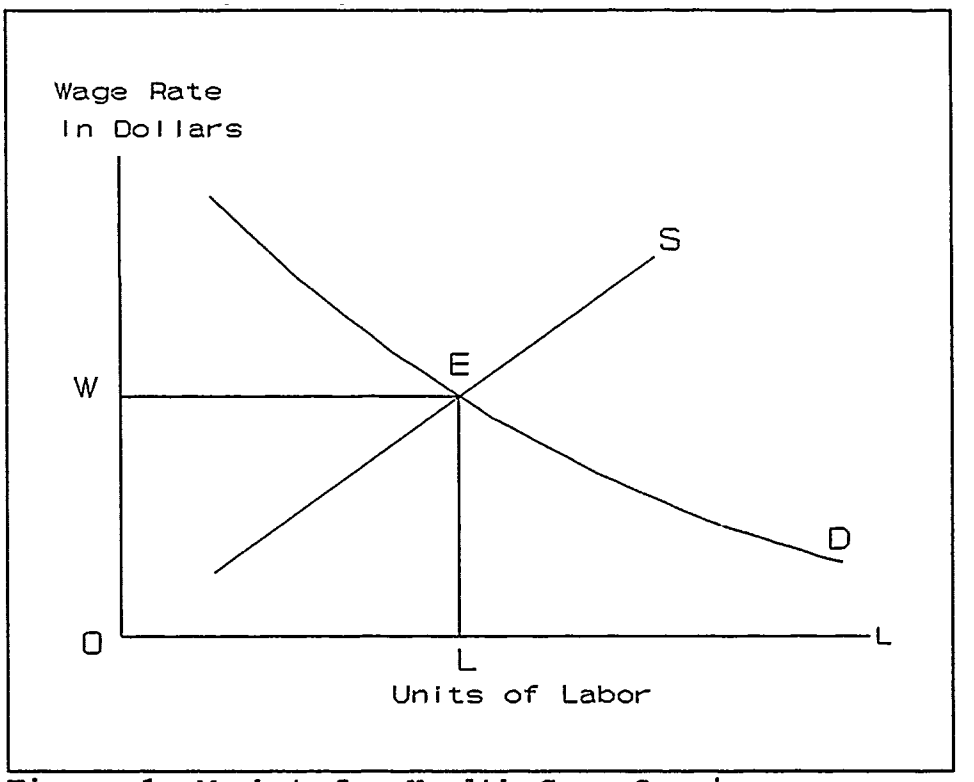

Figure 1 Market for Health Care Services

As a result of the diminishing marginal revenue product[7] associated with each additional input, and the willingness of employers to pay a wage, $W = MRP_L$, demand

[7]For example, a hospital that has only four operating room suites will probably not gain as much revenue from hiring their fifth surgeon as they gained by hiring their fourth. And if they do hire the fifth surgeon, his marginal revenue product would be greater than a sixth surgeon, etc.

curves for health care providers tend to slope down. At higher wage rates less will be demanded than at lower wage rates (ceteris paribus).

Thus the demand for health care services will typically slope down and to the right as in Figure 1. Note that, on the one hand, if people live healthier lifestyles, this will tend to shift D to the left, while, on the other hand, an epidemic might tend to shift D to the right.

3. Interaction of Supply and Demand

a. Equilibrium

The equilibrium level of wages (W*) is determined at the intersection of the supply and demand curves (Point E in Figure 1). This is the wage at which health care providers will make just enough of their services available (L) to satisfy existing demand at that wage. The equilibrium wage will vary with geographic region as well as with occupation. Note further that the real wage can be made up of both pecuniary and non-pecuniary elements.

b. Disequilibrium

(1) Wages Set Above Equilibrium. An example would be a minimum wage. If a union such as the American Medical Association were able to get congressional approval for a minimum wage for physicians that would be above the equilibrium wage, the market would experience a surplus of physicians (or excess supply).

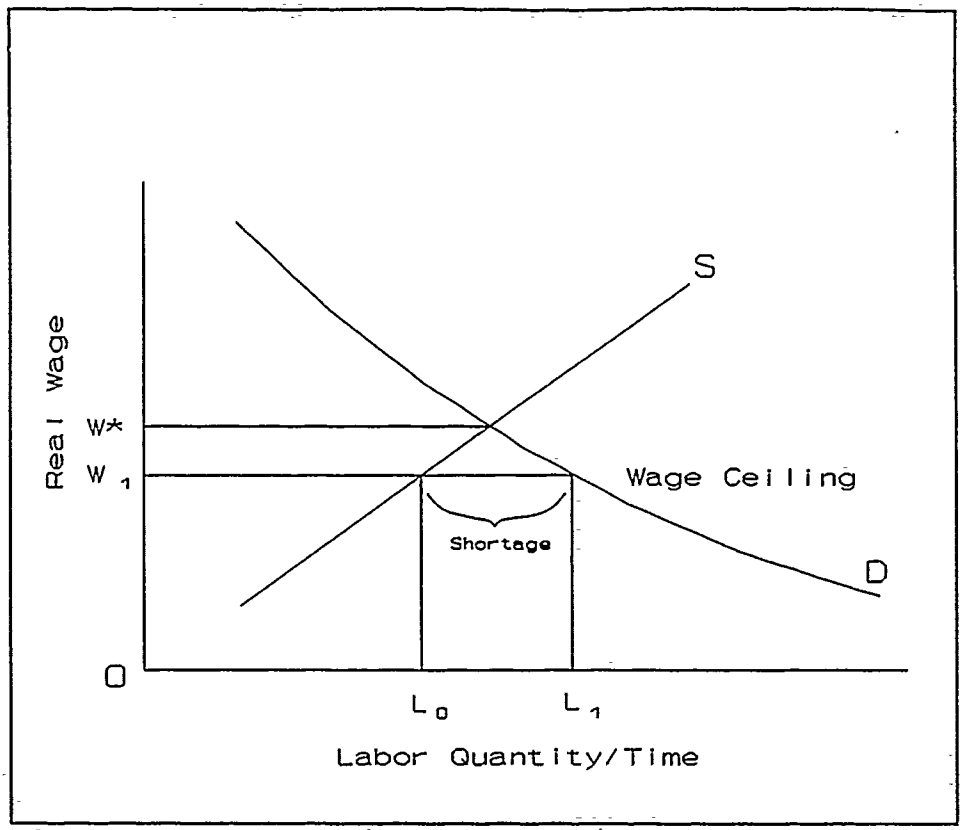

Figure 2 The Impact of Wage Ceilings

(2) Wages Set Below Equilibrium. On the other hand, when a wage ceiling is imposed, and the wage ceiling is binding, or in other words below the equilibrium level of wages, the market will experience shortages (or excess demand). This latter case can be seen in Figure 2. As shown, the wage ceiling is imposed at W_1 but the equilibrium wage is at W^*. Market demand for labor services at wage W_1 is L_1. The market supply at that wage is L_0. The result is a shortage of labor equal to $L_0 - L_1$.

B. MILITARY INTERACTION WITH THE MARKET

The military tends to be a "price taker" in the market for health care services, since it is a relatively small demander in each market. Therefore it cannot generally influence the market wage, but it can hire as many health care providers as it requires if it offers the market wage. Also, it is assumed here that "military requirements" result in perfectly inelastic demand in the short run. With the imposition of wage ceilings, there can be some ramifications that are not immediately apparent. The figures on the following pages provide some insight to the military's interaction with the various markets for health care services. In Figures 3, 4, and 5, the graph on the right-hand-side represents the military's problem, while the graph(s) on the left represent the market(s) from which the military must hire labor services. For example, in Figure 3, L' refers to the military's "requirement", while L* is the market equilibrium level of health care services of a certain type available at the wage W*.

1. A Non-Binding Wage Ceiling (i.e. a wage ceiling above the equilibrium wage)

With a wage ceiling (W') above the equilibrium (W*), as in Figure 3, the military will overcompensate health care providers if it offers the maximum authorized compensation rate.

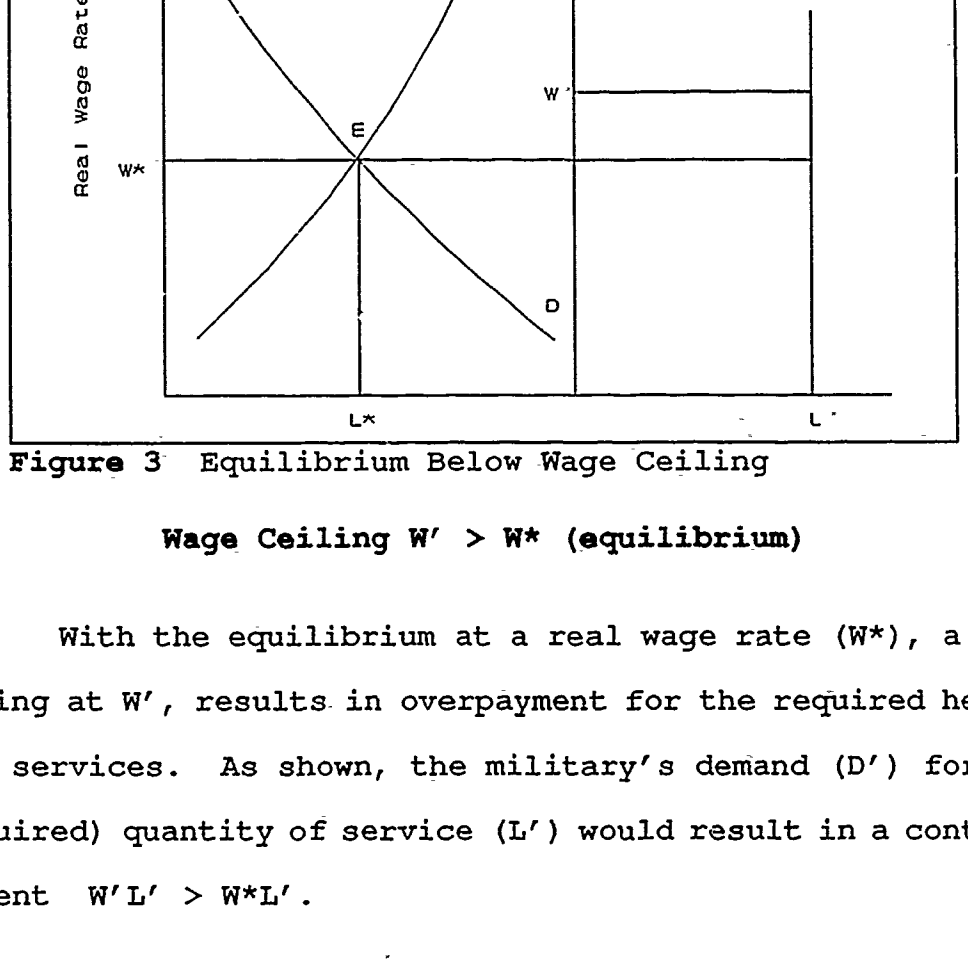

Figure 3 Equilibrium Below Wage Ceiling

Wage Ceiling W′ > W* (equilibrium)

With the equilibrium at a real wage rate (W*), a wage ceiling at W′, results in overpayment for the required health care services. As shown, the military's demand (D′) for the (required) quantity of service (L′) would result in a contract payment $W'L' > W^*L'$.

2. A Binding Wage Ceiling (i.e. a wage ceiling below the equilibrium wage)

When the market equilibrium wage (W**) is above the wage ceiling (W′), the military will be unable to hire it's required health care providers at the ceiling price. Figure 4 shows this situation.

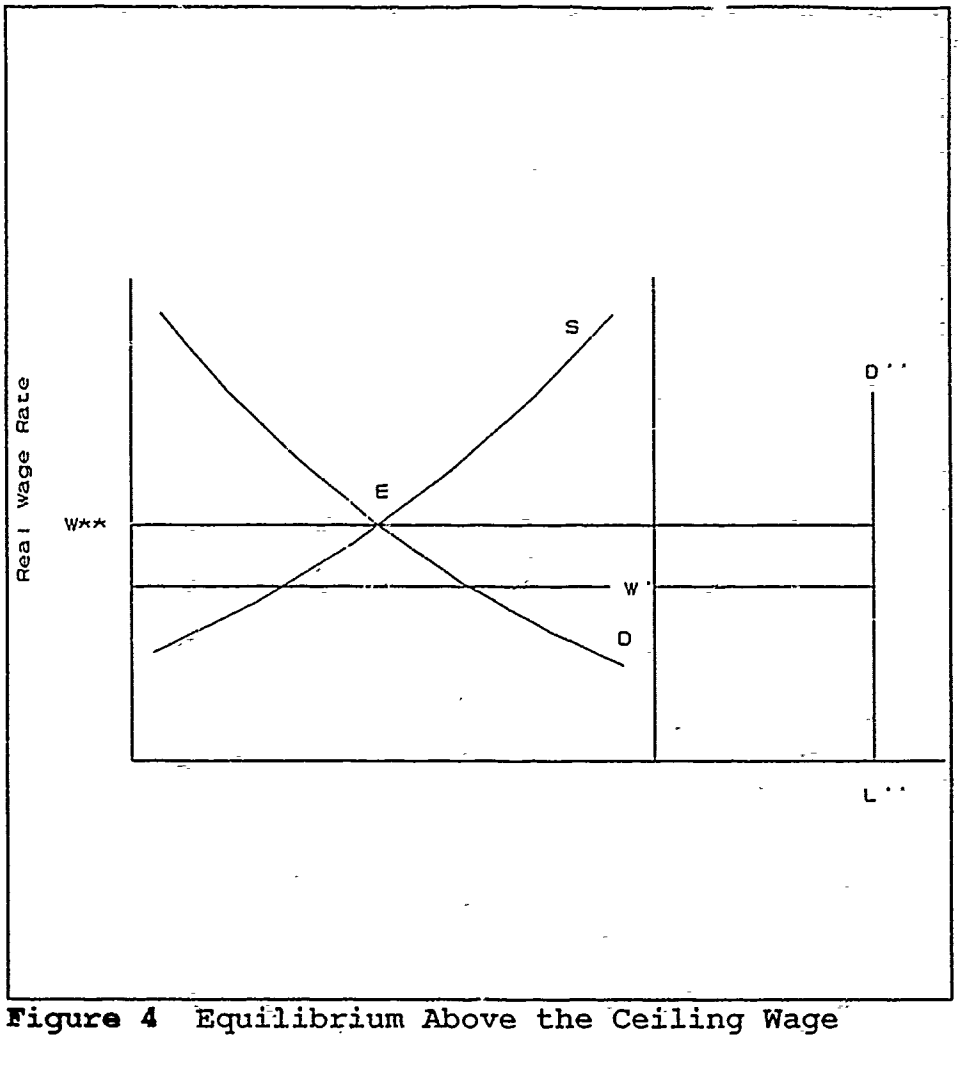

Figure 4 Equilibrium Above the Ceiling Wage

Wage Ceiling W′ < W (equilibrium)**

In this situation the military requirement results in the inelastic demand of D′′ for L′′ units of health care services. The equilibrium wage for the services would require the military to pay a total of W**L′′ for those services. The price ceiling imposed at W′ thus prevents the military from obtaining the required services.

There are only three options (or combinations thereof) that would allow the military to hire health care providers from markets where the equilibrium wage is greater than the wage ceiling (or where the wage ceiling is binding):

1. A waiver - in some circumstances a waiver has been issued to allow the wage ceiling to be exceeded,
2. Various non-wage compensation benefits can make up for restrictions in wages[8], or
3. Quality suffers, as shown in Figure 5.

Referring to Figure 5, the military requirement for a particular health care provider again results in an inelastic demand (D'') for L'' units of labor over the given time frame. The market equilibrium for this particular health care provider will dictate a real wage rate of W**, but the wage ceiling has been imposed at a lower level (W'). It could be argued that a sub-market of health care providers exists as indicated by the graph on the left-hand-side of Figure 5. This sub-market represent's supply and demand for less experienced, or otherwise lower qualified labor services and therefor results in a lower equilibrium wage at W***. This smaller market could end up being the one providing services to the military. Other factors that could place individuals

[8]For example, If an individual health care provider places a relatively high value on the fact that he is not required to insure himself while working under contract with the government, then he may feel that this non-wage compensation makes up the difference between the wage ceiling and the equilibrium wage.

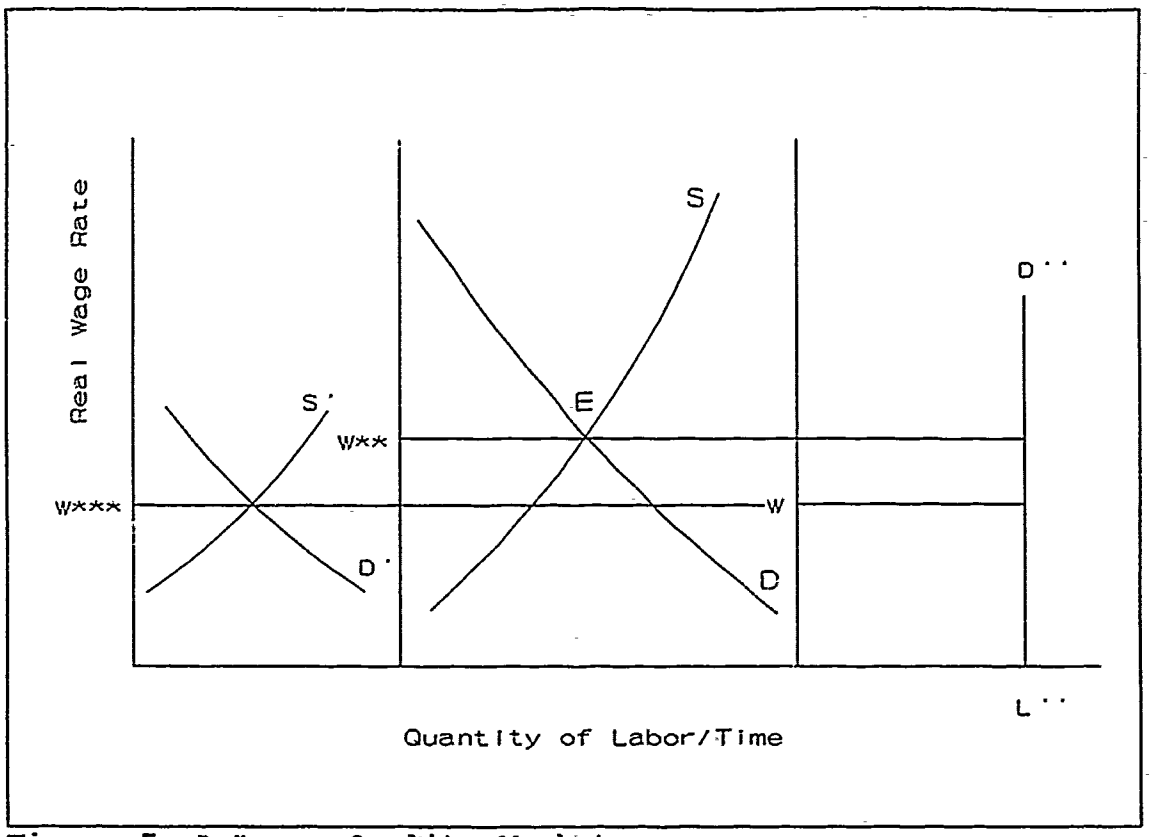

Figure 5 A Lower Quality Market

in this sub-market include language problems (new immigrant doctors), a history of higher incidents of malpractice, etc. The point is that this sub-market is likely to be made up of lower quality health care providers. Note that resolving the problem of a binding wage ceiling with a waiver, as in the first option, is the superior option since it reveals the true cost of the hired services and thus allows managers the opportunity to decide whether these services are truly required. On the other hand, the third option, reduced quality, is probably the worst of the lot since it is difficult to measure the quality of health care, any quality problems are insidious for managers and potentially far more

destructive than the shortages that a binding wage ceiling might have produced.

III. CURRENT SITUATION

A. THE LAW

The Department of Defense Authorization Act of 1984 includes a section entitled "Authority for increased usage of contract health care providers". This section specifically addressed the shortcomings of the then current law[9] as follows:

> Under current law, civilian physicians may be contracted to provide non-personal services in military medical treatment facilities, The authority to award these contracts exists for the Army and the Air Force, but not for the Navy. The maximum rate of pay for a contract surgeon is limited to the pay of an Army or Air Force captain with over four years of service.

The House amendment of 1984, which was the first step toward the law allowing personal services contracts for direct health care providers, attempted to address the problem of physician shortages in the armed forces. The representatives in the House called the shortages "serious" and specifying "those specialties that command very high salaries in the private sector." The House amendment went on to describe the need for personal services contracts for physicians, stating that:

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[9]Two laws existed that permitted the contracting of physicians' nonpersonal services. One for the Army and the other for the Air Force.

> Only a few types of health services, such as radiology and pathology, can be procured by nonpersonal services contracts. Most physician services require some type of direct involvement with the other personnel in the military medical treatment facility and would thus constitute a personal service contact.

The subsequent legislative action, section 1091, Title 10 of the United States Code, was apparently intended to enable the military to enter into personal services contracts with physicians. More specifically, with those physician specialists who command high salaries (Higher than an Army or Air Force Captain with over four years of service) and are therefore in short supply. (See Chapter II for a discussion of the effects of binding price ceilings.) Moreover, this action was aimed at physicians for whom contract methods did not already exist. As indicated in the previous quote, the legislature understood that pathologists and radiologists, for instance, would not need to be hired with personal services contracts since they could be hired with existing nonpersonal services contracts.

However, the resulting public law, contained in Title 10, of the United States Code, includes ambiguous terminology that allows the Defense Department to contract for personal and nonpersonal services to provide direct health care service as it determines is required. This language opened the door to all health care providers (physicians and non-physicians alike) to compete for government contracts.

B. ONGOING PERSONAL SERVICES CONTRACTS

On September 10, 1990 the Navy was engaged in 221 personal services contracts for direct health care providers. These 221 contracts amounted to 544 full time equivalent contractor employees (FTE's). Surprisingly, of those 544 FTE's, only 17 of these were for physicians. Moreover, of those 17 full time equivalent physicians, four FTE's were for the services of radiologists or pathologists. So only 13, or about 2.4 percent, of the 544 FTE's the Navy is currently procuring by contract, are for services of physicians that are among the type for which the legislation was originally written. The total monthly bill for these contracts is over $2.2 million. The breakdown of health care providers currently under contract, by profession, appears in the following table:

TABLE II CURRENT PERSONAL SERVICES CONTRACTS

Profession	Group	Contracts	FTE's
Physicians	I	15	17
Dentists	I	68	67.5
Other professionals	II	18	35.3
Registered Nurses	III	17	286.6
Dental Hygienists	IV	86	82.6
Other paraprofessionals	IV	17	55
Totals:		221	544

Appendix A contains a full list of the 221 contracts by location with price and contract duration indicated.

1. Physicians

As indicated in Table II, only 15 personal services contracts exist for physicians. The list is contained as Table III on the following page.

These 15 contracts total 17 full time equivalent physicians. Interestingly, four of the 17 FTE's are for radiologists and pathologists, specialties previously thought obtainable through nonpersonal services contract. Furthermore, of the specialties listed, one might argue that few are among "those specialties that command very high salaries in the private sector," as the Representatives in the House described the need for these personal services contracts. For example, general medical officers (GMO) and Pediatricians are not among the physicians on the higher end of the pay scale.[10] The table also contains information about the price of the contracts currently operating. This will be discussed in the following section.

Table III indicates the various physician specialists with whom the Navy now contracts. The first column, *"Specialty"*, indicates the medical specialty. The column marked *"FTE"* shows the number of full time equivalent employees contracted. *"Months"* is the contract duration in

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[10]The American Medical Association (1988) reports that the average net income after expenses and before taxes for a self-employed physician is $146,200.00. General practitioners (GMO's) earn $96,900 annually and Pediatricians make $96,500.00 per year.

TABLE III LIST OF PERSONAL SERVICES CONTRACTS FOR PHYSICIANS

Specialty	FTE	Months	Price	Authorized	Difference
GMO	0.5	12	$7,045	$37,979	$30,934
GMO	1	6	$29,120	$35,286	$6,166
GYN	1	9	$52,754	$57,837	$5,083
HIV Internist	2	12	$223,255	$149,337	($73,918)
Neuro Radiologist	1	12	$259,770	$74,669	($185,101)
OB/GYN	1	12	$30,600	$76,345	$45,745
OB/GYN	1	12	$73,500	$76,345	$2,845
OB/GYN	3	12	$500,000	$215,119	($284,881)
Pathologist	1	12	$229,480	$71,706	($157,774)
Pathologist	1	12	$242,000	$71,269	($170,731)
Ped Endocrinologist	0.5	12	$25,000	$38,172	$13,172
Pediatrician	1	12	$71,923	$77,116	$5,193
Physiologist	1	5	$15,600	$31,810	$16,210
Psychologist	1	12	$64,980	$71,269	$6,289
Radiologist	1	12	$114,000	$74,669	($39,331)

months. And *"Price"* indicates the contract price. The column marked *"Authorized"* shows the maximum authorized compensation[11] for each contract based on location, number of FTE's, and duration. The *"Difference"* column displays the amount that the contract was (over) or under the maximum authorized compensation rate.

2. Dentists and Dental Hygienists

Almost 70 percent of the total number of personal services contracts are related to dental services. Dentists and dental hygienists, acquired by contract, number 150.1

[11]Maximum authorized compensation equates to a wage ceiling as discussed in Chapter II, this wage ceiling may or may not be binding.

full time equivalents. That is more that one fourth of the current total number of FTE's.

However, historically, the Navy Dental Corps has not experienced difficulty retaining good dentists and dental technicians. No mention of shortfalls in the dental community can be found in any discussions leading to Section 1091 of Title 10, United States Code. Why then has the dental community embraced this route of personnel acquisition so readily?

One might speculate that the dental community is taking full advantage of monies appropriated for personal services contracts since the price ceiling (of roughly $74,000.00/year) imposed by Congress is not binding in the market for dentists and dental hygienists. The market rate of wages for dentists and dental hygienists is well below the price ceiling imposed by Congress. This is shown in Figure 6, and corresponds to section B.1 of Chapter II, the discussion of a binding wage ceiling.

Moreover, it has been suggested that the actual market demand for dentists has been steadily decreasing as a result of better oral hygiene (Hawes, 1988). Thus, even a current fixed annual wage ($W^* < \$74K$), which results from a contract may be higher than the new equilibrium wage ($W^{**} < W^*$). The effect of decreasing market demand (ceteris paribus) necessarily causes the equilibrium to move down the supply curve. However, with a non-binding price ceiling, the dental

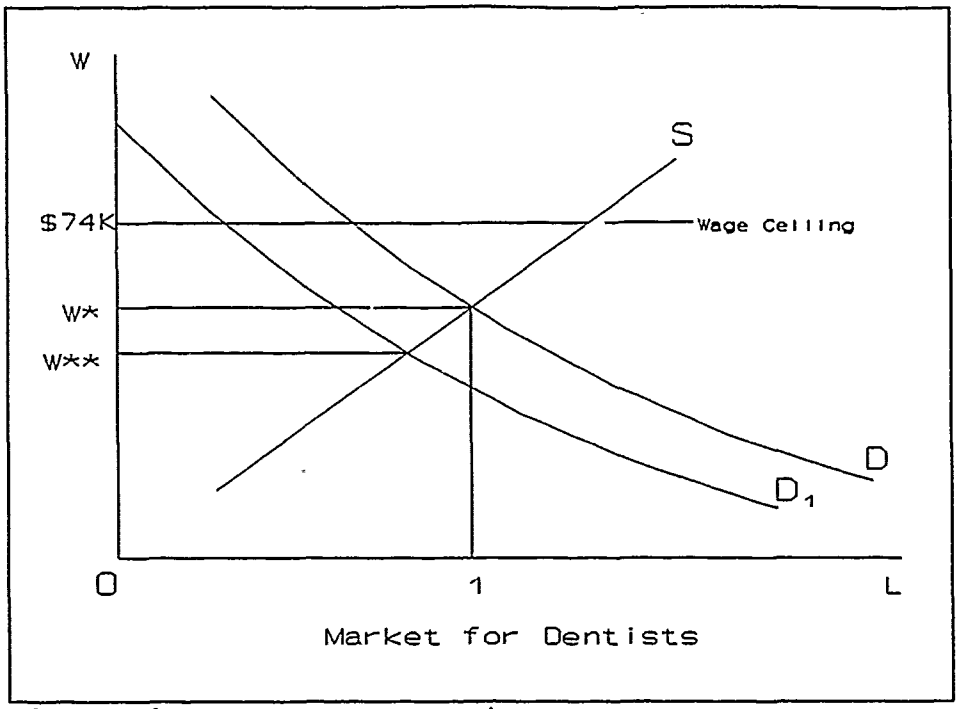

Figure 6 Market for Dentists

department can augment it's personnel pool by exploiting an implicit equality provided in the directives governing personal services contracts between dentists and physicians. Unfortunately, this treatment of dentists equal to physicians within the Navy Medical Department appears to deviate from the original purpose of the legislation which was targeted at physicians.

3. Registered Nurses

Over 50 percent of the FTE's are contained in a relatively few contracts for registered nurses. One would assume that the nature of the nursing profession lends itself to employment by some fairly standard statements of work. This would allow a large number of individuals to be hired

with alternative contracts. Thus using personal services contracts for this type of labor contracting, although abiding by the letter of the law, does not seem consistent with the intention of the law. Again, personal services contracts were originally intended to obtain the services of unique, highly specialized individuals.

4. Other Professionals and Paraprofessionals

About 16 percent of the contracts and a comparable portion of the full time equivalent contract employees fall into the areas of other professionals and paraprofessionals. The former of these two groups contain healthcare providers with degrees such as pharmacists, optometrists, psychologists, and specially trained registered nurses (nurse practitioners, anesthetists, and perfusionists). The paraprofessionals group consists of various technicians who may or may not have, or require, degrees or licenses for the performance of their duties under the contract. Examples of this final group would include pharmacy, laboratory, and X-ray technicians.

The rationale in contracting these personnel in most instances has little to do with the design of the original legislation. In most cases, the service is procured by personal services contract because the civil service pay scale is inadequate to compensate these professionals in high cost geographic regions. Thus instead of curtailing services or

reducing productivity, the service is procured through personal services contracts.

C. COMPENSATION IN PERSONAL SERVICES CONTRACTS

Table I contains the basic breakdown of authorized compensation rates for personal services contracts for direct health care providers. The maximum rate for physicians and dentists is the sum of all basic pay and allowances of an officer in the pay grade of a Navy Captain, or Colonel of the other armed services, including the variable housing allowance (VHA). As a result of VHA,there is a slight difference in the maximum compensation allowed in different locations.

The contents of Table I (Chapter I), which indicates maximum authorized wages for given specialties and occupations, were issued by the Department of Defense. In fact, the Law (sec. 1091, Title 10, United States Code) only restricted contractor compensation rates under personal services contracts to "the rate of basic pay and allowances authorized...for a commissioned officer in pay grade O-6 with 26 or more years of service". But the Department of Defense went further in restricting contractor compensation rates when original directives governing personal services contracts for direct health care providers were issued.

These restrictions were directed by the Department of Defense through DOD Instruction 6025.5 of February 27, 1985 and the DOD FAR Supplement of 1988. Although these are

department of Defense directives, they do not carry the same force of law as would, for example, the Federal Acquisition Regulation or Title 10, of the United States Code.

Appendix B provides data on all currently engaged personal services contracts for direct health care providers. It is broken down by profession/occupation. It contains: contract prices; authorized maximum compensation rates per month; total maximum authorized compensation rates for the contract's duration and location; and differences between total maximum allowable rates and actual contract prices, for each contract. This *"Difference"* column is either positive or negative. A value appearing in parentheses indicates a negative value which means that the contract price exceeded the maximum allowable rate for that contract by the specified amount. A positive value indicates that the contract price was less than the maximum allowable rate for that contract, implying possible savings (quality assumed constant)

1. Physicians

The average authorized compensation rate for existing contracts for physicians is $6,164.52 per FTE[12] per month or about $74,000.00 per year. This is the weighted average of the maximum payable rate based on the location, duration, and number of full time equivalents. The weighted average of the

[12]Full time equivalent, as previously described in foo-te 5 on page 14.

actual contract price for these contracts is $10,314.00 per FTE per month.[13]

In some instances it has been necessary for the Navy to exceed the authorized rates. (Note values in parentheses in Table III) In these circumstances, waivers of the wage ceiling (see Chapter II, section B.2) are requested when equilibrium market wages prevent the Navy from hiring the required health care provider(s). This has been the case in six of the 15 personal services contracts for physicians. Note that three of those contracts are at prices more than three times the generally authorized amount, while another is well over twice the legal mark. No contractors were willing to work for the maximum authorized rate (or wage ceiling) in each of these circumstances. Had a contractor been willing, one would have to question the quality of service he would deliver (see Chapter II, section 2.B).

a. Example

One contract has been awarded for three full time equivalent obstetrician/gynecologists (OB/GYN) at a price of $500,000.00 for 12 months. That is an average of $166,666.67

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[13]A weighted average is used to keep the relative number of full time equivalents in perspective. The weighted average of the maximum payable rate is calculated by dividing the sum of the products of the maximum monthly authorized rate multiplied by the number of months duration of the contract multiplied by the number of full time equivalents contracted divided by the sum of the products of the number of months duration of the contract multiplied by the number of full time equivalents contracted.

per physician per year. The maximum authorized rate is $71,706.24 per physician per year in Orlando, Florida.[14] The average physician's net income (for OB/GYN) in that part of the country is $162,400.00. The 25th percentile net income is about $100,000.00 (after all expenses including liability insurance) (AMA, 1988). No contractors were willing to provide the services of three full time equivalent OB/GYN doctors for the maximum allowable contract price of $215,118.72. Had a contractor been willing to accept $215,118.72, he would be receiving $90,693.76 less per physician than the average net income for OB/GYN physicians or $28,297.76 less per physician than the 25th percentile. To make up this difference, he might consider his savings in liability insurance, but his insurance rates would have to be significantly higher than the average $35,300.00 paid by OB/GYN physicians each year.[15] One would hope that the Navy would not contract with a physician who's professional liability insurance premiums were more than $125,000.00 per year! But this does support our earlier hypothesis that savings in liability insurance could provide an incentive for less-competent physicians to seek employment through government contracts. The wage ceiling is binding for physicians.

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[14]Recall that rates vary with location due to the variable housing allowance component of total compensation.

[15]This argument is purely economic discourse and does not emphasize other non-quantifiable, non-wage compensation that a physician under contract with the military might realize.

2. **Dentists and Dental Hygienists**

The average authorized compensation rate for the existing contracts for dentists is $6,182.41 per FTE per month, or about $74,000.00 per year. The slight difference from the maximum wage of physician contracts is primarily caused by differences in variable housing allowances. However, the weighted average of the actual contract price for dentist's contracts is $3,449.55 per FTE per month, much below physician's actual contract price of $10,314.00 per FTE per month, and significantly less than the maximum allowable. The wage ceiling is not binding for dentists.

Dental hygienists under contract are paid an average of $3,048.91, a figure fairly close to the maximum allowable weighted average of $3,406.86. The average contract price for dentists delivers an average annual salary of about $41,400.00. The average dental hygienist under contract makes about $36,600.00 per year. The wage ceiling is close to the market equilibrium wage for dental hygienists.

3. **Other Professionals**

Again, these are health care providers with degrees such as pharmacists, optometrists, psychologists, and specially trained registered nurses (nurse practitioners, anesthetists, and perfusionists). This is the only other group who's weighted average monthly cost per FTE is less than the Maximum allowable under the Department of Defense

directive. These contract employees average $4,083.33 per month per FTE while their maximum allowable remuneration is $5,253.44. The wage ceiling is generally not binding for this group.

Most of the 18 different contracts for these professionals have prices which hover around 75 - 80% of the maximum allowable rate. Two of the three that exceed the authorized level are for contracts involving less than a full time equivalent. One contract is for a biweekly optometrist in Barstow, California (0.1 FTE) and the other is for a weekly pharmacist in Port Hueneme, California (0.2 FTE). These contracts have a maximum allowable rate prorated to the reduced time of contract performance. In other words, the optometrist in Barstow has a maximum allowable compensation rate of $485.78 per month. In order to secure a contract the Navy had to exceed this prorated amount to make entering into a government contract worth the contractor's while. The other contract exceeding the authorized level is one for a Nurse Practitioner in Great Lakes, Illinois. The maximum rate is exceeded by less than five percent, but a waiver had to be obtained.

4. Registered Nurses (RN)

There are currently 17 personal services contracts for registered nurses. Nine of them are in Bethesda, Maryland; five are in Oakland, California; two are being performed in

Portsmouth, Virginia; and one is in San Diego, California. All of the contracts in Bethesda and four of the five Oakland contracts exceed the maximum allowable level. The other Oakland contract is priced at about 85% of the maximum.

The weighted average price per month per FTE is $4,737.06 when the maximum allowable level averages $4,448.56. A difference of only $286.50, or about six percent over the allowable level.

In Portsmouth the nursing contracts were let at much less than the authorized maximum level. One of their contracts is for 39 full time equivalent registered nurses and the price is only $585,000.00 for the year. That translates into a annual salary of about $15,000.00 for those registered nurses. Meanwhile, for example, dental hygienists across the bay in Norfolk, Virginia make an average annual salary of $35,304.95 while engaged in personal services contracts with the Navy. Something is obviously wrong with this situation. Either RN's in Norfolk are willing to work for less than market wages (in which case one must suspect quality), or the data is pointing to a strange manipulation of contracts, or the numbers are incorrect.

If one were to look at the other 16 nursing contracts, removing the 39 FTE's of Portsmouth's questionable personal services contract, one would find the negative gap widens between the actual average price and the maximum authorized compensation rate. A recalculation would result in a weighted

average price of $5,284.00 per FTE per month compared to a weighted average maximum rate (wage ceiling) of $4,481.53. The contract in Portsmouth skews the data, reducing the average price per FTE by more than ten percent. The wage ceiling for RN's is more binding than it first appears.

5. **Paraprofessionals**

The average contract price among paraprofessionals is well over the maximum authorized. There are two contracts that one might argue skew the data. Both are in Bethesda, Maryland. One is for one full time equivalent angiographer compensated at a rate that would exceed any other medical personal service contract the Navy now has. The reported price for this one FTE contract is $309,950.00 per year. The other contract is for seven full time equivalent respiratory technicians at a rate of $68,776.43 per year each, for a total of $481,435.00. Both of the occupations have a maximum authorized rate of $41,928.48 per FTE per year. On these two contracts alone the actual price paid exceeds the maximum authorized by close to half a million dollars. Enough, it seems, to be able to hire an additional 30 of those $15,000.00 a year registered nurses at Portsmouth.

Without these two contracts, the remaining personal services contracts for paraprofessionals would have an average price of $3,093.42 per FTE per month, well under the maximum

rate of $3,415.39. The wage ceiling is generally not binding for paraprofessionals, with two notable exceptions.

D. CHAPTER SUMMARY

This chapter examined the current law and DOD directives, their rationale and their ramifications. Additionally, the chapter described the existing Navy personal services contracts for direct health care provides, breaking down the list of ongoing contracts into professional/occupational groups. The last half of the chapter examines average rates of compensation in various ongoing contracts comparing these rates to the maximum authorized by the Department of Defense. Once again, the results are:

1) The wage ceiling is binding for physicians.
2) The wage ceiling is not binding for dentists.
3) The wage ceiling is generally not binding for "other professionals".
4) The wage ceiling for Registered Nurses is more binding than it at first appears.
5) The wage ceiling is generally not binding for paraprofessionals, with two notable exceptions.
6) The wage ceiling is close to the market equilibrium for dental hygienists.

Finally, several contracts are highlighted which appear extreme in either excessive or questionable compensation rates.

IV. PROBLEM SUMMARY

A. FEW CONTRACTS FOR THE ORIGINAL JUSTIFICATION

The rationale for personal services contracts is vague. Very little guidance is given to indicate why the Navy should procure these services by contract other than to increase beneficiary access to military medical treatment facilities, to reduce the burden on CHAMPUS, and to supply the Graduate Medical Education program with the highly specialized physician providers it requires. There is no mistaking the intended target of these contracts however. It is obvious from the language employed by the legislature, that personal services contracts for direct health care providers are intended to obtain the services of highly specialized physicians.

One would argue that the ambiguity of the law and current directives have invited many unintended, but legal, interpretations. Too few of the existing contracts appear to be in answer to the original justification for the increased contracting authority which was brought before the Senate Armed Services Committee in 1983.

B. AMBIGUOUS MISSION

Underlying most of the problems experienced by Navy Medicine is an ambiguous mission. The Medical Blue Ribbon

Panel of 1988 made this point. On the one hand, the Medical Blue Ribbon panel described the Navy Medical Department as having two primary and complementary missions: (1) meet operational and wartime medical requirements, and (2) deliver peacetime health care to eligible beneficiaries. On the other hand, the same report describes these "complementary missions" as conflicting. (Department of the Navy, 1988)

The purpose of personal services contracts for direct health care providers is captured in phrases such as "facilitate mission accomplishment" and "maximize beneficiary access". But with a medical mission whose objectives are difficult to measure and without a clear definition of goals, it is hard to quantify how any contract actions might contribute to mission accomplishment. The phrase "maximize beneficiary access" could be pursued literally forever. Regardless of the resources provided to military medicine, without limiting beneficiary access, or limiting what procedures are covered, in some way, military medicine can never fulfill such an unconstrained objective. (In fact Melese [1990] has suggested this policy actually invites an expansion of the dependant beneficiary base over time.)

C. WAGE CEILINGS

The data suggests that wage ceilings mandated by legislation and DOD direction are apparently so easily circumvented that one would argue that, in effect, they are

not binding. On the other hand, an argument could be made that the imposition of wage ceilings reduces the opportunity to take advantage of competitive market conditions. If, for instance, the market contains prospective contractors on either side of the imposed wage ceiling, the contractors who demand remuneration above the wage ceiling are not considered for the contract. This effect reduces the number of prospective contractors to those willing to work for a compensation rate less than or equal to the maximum authorized rate.

This condition is worsened by the government's indemnification of the contractor. By not requiring contractors to have their own liability insurance, the government, in effect, is providing a non-wage compensation equal to what the contractor would have had to spend on liability insurance premiums. This additional compensation favors the health care provider who bears the highest liability insurance premiums, the health care provider at highest risk of malpractice, the health care provider of lesser quality (see the discussion in Chapter II). This leads to an empirically testable hypothesis that the military, by indemnifying the contractor, is more likely to obtain the services of individuals who have a history of greater than average liability insurance rates.

D. APPARENT IMPROPRIETY IN CONTRACTING

It would seem presumptuous at best to declare any of the ongoing personal services contracts for direct health care providers improper without further study. The appearance of impropriety, on the other hand, must be noted as a problem with this type of contracting. One would argue that a major rationale for price ceilings in these contracts is to prevent the government from appearing improper in procurement of services from a limited number of sources.

However, a number of questionable contracts appear among the list contained in the appendices. Some of those contracts have been mentioned in Chapter III, and some have not. For instance, what justifies paying a pharmacist at the Naval Medical Clinic at Port Hueneme, California $55,000.00 a year to perform the services of a two tenths (0.2) full time equivalent pharmacist? This equates to more than $1,000.00 per week for an eight hour visit each week. Perhaps the data is incorrect.

E. CHAPTER SUMMARY

This chapter attempts to piece together some of the obvious and a few of the not so obvious problems that have arisen from the use of personal services contracts for direct health care providers.

The chapter revisited the fact that relatively few of the existing contracts seem to follow the original justification

and touched upon a very large problem in military medicine, the ambiguous and ill defined specification of the mission.[16] The problems surrounding price ceilings were found to play less of a role in contributing to shortages than had previously been thought. This is due primarily to the apparent ease with which price ceilings are exceeded. The price ceilings combined with waivers of malpractice liability, might contribute to quality problems.[17] Finally, the appearance of impropriety in the contracting of certain services was discussed.

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[16]Melese (1990) provides a challenge to the traditional views of military medicine's dual mission.

[17]Managers should note that shortages might be preferred to quality problems, since shortages are non-transparent and can be managed with reduced production, while quality problems are more insidious and difficult to manage.

V. CONCLUSIONS

A. OPINIONS

The original objective was the investigation of the restrictive pricing policy used by the Department of Defense in personal services contracts for direct health care providers. Data, including a list of current Navy personal services contracts, suggest that price ceilings imposed have had little effect on the government's ability to contract for most direct health care services. Two reasons explain this apparent anomaly: (1) price ceilings are routinely exceeded when no contractors are willing to offer services at a wage equal to or less than the price ceiling; and (2) the majority of existing contracts is for health care providers for whom the ceiling price appears to exceed the market wage and thus Department of Defense mandated restrictions for these occupations are not binding.

There are a few contracts in which price restrictions may have some effect on the quality of the contractor. Contractors are not required to obtain their own liability insurance, the government insures the contractor. This results in a non-wage compensation to the contractor equal to what he would have had to pay for liability insurance. A larger benefit, and therefor greater overall compensation, is

given to the contractor who would otherwise pay larger malpractice premiums. This provides a relatively greater incentive for the less reputable health care provider to seek employment through a government contract.

A number of contracts deserve more in depth study. Some of these have an appearance of impropriety or error in reporting, some just seem very inefficient.

Finally the question of a more definitive mission statement, one might argue, is still a question without an answer. A mission statement starts with vision, values, and expectations and is the most important element of the organization (Digman, 1990). The Navy Medical Department Mission warrants further discussion. As one alternative, Melese (1990) offers an innovative, if non-traditional, approach to military medicine which focuses on a "return to 'medical readiness,'" substituting direct income payments for currently provided 'medical care' to dependents. This approach would ultimately reduce the requirement for personal services contracts for non-medical readiness physicians such as OB/GYN and pediatricians.

B. RECOMMENDATIONS

Remove wage restrictions in personal services contracts, but pay careful attention to competitive market wages. Market wages in the health care industry are fairly easy to disclose in most geographic regions, the competitive market wage should

be used as a guide in contract pricing instead of wage ceilings. Wage ceilings can have two negative impacts:

1) They can result in shortages of critical occupations/specialties, and

2) They may reduce the quality of health care providers.

Finally, efforts to circumvent price restrictions may lead to some impropriety in contracting. If personal services are to be procured by contract, market forces must be respected to ensure that the best qualified as well as best priced contractors are employed.

APPENDIX A CURRENT PERSONAL SERVICES CONTRACTS FOR DIRECT HEALTH CARE PROVIDERS

	Location	Profession/Occupation		FTE's	Months	Price
1	Barstow	Optometrist	II	0.1	12	$13,848
2	Bethesda	Neuro Radiologist	I	1	12	$259,770
3	Bethesda	Dentist	I	1	12	$42,660
4	Bethesda	HIV Internist	I	2	12	$223,255
5	Bethesda	Radiologist	I	1	12	$114,000
6	Bethesda	Dentist	I	1	12	$27,900
7	Bethesda	Psychologist	II	1	12	$42,849
8	Bethesda	Pharmacist	II	6	12	$337,334
9	Bethesda	Nurses	III	4.2	12	$294,248
0	Bethesda	Nurses	III	12.6	12	$882,745
1	Bethesda	Nurses	III	1.8	12	$123,940
12	Bethesda	Nurses	III	6	12	$420,547
13	Bethesda	Nurses	III	7	12	$489,100
14	Bethesda	Nurses	III	5.6	12	$392,331
15	Bethesda	Nurses	III	23	12	$1,596,652
16	Bethesda	Nurses	III	5.6	12	$392,331
17	Bethesda	Nurses	III	4	12	$279,469
18	Bethesda	Dental Hygienist	IV	1	12	$40,000
19	Bethesda	Dental Hygienist	IV	1	12	$39,000
20	Bethesda	CAT Scan Techs	IV	4	12	$168,300
21	Bethesda	Respiratory Tech	IV	7	12	$481,435
22	Bethesda	Dental Hygienist	IV	1	12	$37,020
23	Bethesda	Angiographer	IV	1	12	$309,950
24	Bethesda	Dental Hygienist	IV	1	12	$41,112
25	Bethesda	X-Ray Techs	IV	4	12	$94,000
26	Bremerton	Dentist	I	1	11	$50,000
27	Bremerton	Dental Hygienist	IV	1	12	$36,000
28	Bremerton	Dental Hygienist	IV	1	12	$44,784
29	Bremerton	Dental Hygienist	IV	1	12	$44,784
30	Bremerton	Dental Hygienist	IV	1	12	$45,108
31	Bremerton	Dental Hygienist	IV	1	12	$46,020
32	Camp Pend	Pharmacist	II	1	12	$56,680
33	Camp Pend	Speech Pathologist	II	1	12	$38,400
34	Camp Pend	Ultrasound Tech	IV	1	5	$9,250
35	Camp Pend	CAT Scan Techs	IV	1	12	$21,250
36	Camp Pend	CAT Scan Techs	IV	1	3	$48,000
37	Charleston	Dentist	I	1	12	$47,549
38	Cp Lejeune	GMO	I	1	6	$29,120
39	Cp Lejeune	Dental Hygienist	IV	1	12	$30,000

	Location	Profession/Occupation		FTE's	Month	Price
40	Groton	GYN	I	1	9	$52,754
41	Groton	Pediatrician	I	1	12	$71,923
42	Groton	Pharmacist	II	1	10	$35,891
43	Grt Lakes	Dentist	I	1	4	$13,829
44	Grt Lakes	Dentist	I	1	4	$13,600
45	Grt Lakes	Dentist	I	1	12	$42,068
46	Grt Lakes	Dentist	I	1	12	$41,400
47	Grt Lakes	Dentist	I	1	12	$41,834
48	Grt Lakes	Dentist	I	1	12	$43,956
49	Grt Lakes	Dentist	I	1	4	$13,996
50	Grt Lakes	Dentist	I	1	7	$40,488
51	Grt Lakes	Dentist	I	1	4	$13,996
52	Grt Lakes	GMO	I	0.5	12	$7,045
53	Grt Lakes	Dentist	I	1	12	$43,992
54	Grt Lakes	Dentist	I	1	4	$13,833
55	Grt Lakes	Dentist	I	1	4	$14,000
56	Grt Lakes	Dentist	I	1	7	$41,364
57	Grt Lakes	Dentist	I	1	12	$41,834
58	Grt Lakes	Nurse Practitioner	II	1	12	$66,543
59	Grt Lakes	Dental Hygienist	IV	0.5	12	$22,714
60	Grt Lakes	Dental Hygienist	IV	0.5	12	$18,689
61	Grt Lakes	Dental Hygienist	IV	1	12	$36,750
62	Grt Lakes	Dental Hygienist	IV	1	12	$37,378
63	Grt Lakes	Dental Hygienist	IV	1	12	$29,700
64	Grt Lakes	Dental Hygienist	IV	1	8	$32,305
65	Grt Lakes	Dental Hygienist	IV	1	12	$35,640
66	Grt Lakes	Dental Hygienist	IV	1	12	$37,378
67	Grt Lakes	Dental Hygienist	IV	1	12	$35,400
68	Grt Lakes	Dental Hygienist	IV	1	12	$33,280
69	Jacks	Dentist	I	2	12	$52,056
70	Jacks	Dentist	I	1	11	$45,303
71	Jacks	Dentist	I	1	12	$50,457
72	Jacks	Pharmacist	II	1	12	$51,360
73	Jacks	Dental Hygienist	IV	1	12	$35,400
74	Jacks	Dental Hygienist	IV	0.5	12	$18,000
75	Jacks	Dental Hygienist	IV	1	9	$27,600
76	Jacks	Pharmacy Techs	IV	1	12	$25,689
77	Long Beach	Dentist	I	1	12	$47,760
78	Long Beach	Dental Hygienist	IV	1	12	$43,626
79	Long Beach	Dental Hygienist	IV	1	12	$43,626
80	Millington	Pathologist	I	1	12	$242,000
81	Millington	Psychologist	I	1	12	$64,980
82	Newport	Dentist	I	1	7	$44,940
83	Newport	Dentist	I	1	8	$42,656
84	Newport	Dentist	I	1	8	$39,872

	Location	Profession/Occupation		FTE's	Month	Price
85	Newport	Dentist	I	1	11	$44,000
86	Newport	Dental Hygienist	IV	0.6	6	$6,116
87	Norfolk	Dentist	I	1	12	$43,200
88	Norfolk	Dentist	I	1	12	$38,500
89	Norfolk	Dentist	I	1	12	$39,996
90	Norfolk	Dentist	I	1	12	$42,996
91	Norfolk	Dentist	I	1	12	$41,000
92	Norfolk	Dentist	I	1	12	$41,000
93	Norfolk	Dentist	I	1	12	$35,200
94	Norfolk	Dentist	I	1	12	$45,088
95	Norfolk	Dentist	I	1	12	$35,244
96	Norfolk	Dental Hygienist	IV	1	12	$37,200
97	Norfolk	Dental Hygienist	IV	1	12	$37,200
98	Norfolk	Dental Hygienist	IV	1	12	$37,200
99	Norfolk	Dental Hygienist	IV	1	12	$37,200
100	Norfolk	Dental Hygienist	IV	1	12	$37,200
101	Norfolk	Dental Hygienist	IV	1	12	$37,200
102	Norfolk	Dental Hygienist	IV	1	12	$36,900
103	Norfolk	Dental Hygienist	IV	1	12	$33,804
104	Norfolk	Dental Hygienist	IV	1	12	$37,200
105	Norfolk	Dental Hygienist	IV	1	12	$29,500
106	Norfolk	Dental Hygienist	IV	1	12	$36,400
107	Norfolk	Dental Hygienist	IV	1	12	$29,400
108	Norfolk	Dental Hygienist	IV	1	12	$37,200
109	Norfolk	Dental Hygienist	IV	1	12	$32,400
110	Norfolk	Dental Hygienist	IV	1	12	$37,200
111	Norfolk	Dental Hygienist	IV	1	12	$30,000
112	Norfolk	Dental Hygienist	IV	1	12	$34,500
113	Norfolk	Dental Hygienist	IV	1	12	$37,200
114	Norfolk	Dental Hygienist	IV	1	12	$36,000
115	Norfolk	Dental Hygienist	IV	1	12	$36,000
116	Norfolk	Dental Hygienist	IV	1	12	$34,500
117	Oakland	Pharmacist	II	3	12	$160,555
118	Oakland	Nurses	III	30	12	$2,905,736
119	Oakland	Nurses	III	31	12	$2,565,525
120	Oakland	Nurses	III	9	12	$687,657
121	Oakland	Nurses	III	58.8	12	$2,696,358
122	Oakland	Nurses	III	7	12	$531,596
123	Oakland	Dental Hygienist	IV	1	8	$28,320
124	Oakland	Radiation Therapy	IV	2	9	$67,307
125	Orlando	OB/GYN	I	3	12	$500,000
126	Orlando	Dentist	I	1	12	$50,400
127	Orlando	Dentist	I	1	7	$29,850
128	Orlando	Dentist	I	1	12	$42,000
129	Orlando	Pathologist	I	1	12	$229,480
130	Orlando	Dentist	I	1	12	$48,600
131	Orlando	Dentist	I	1	12	$48,000

	Location	Profession/Occupation		FTE's	Months	Price
132	Orlando	Dentist	I	1	12	$52,056
133	Orlando	Dental Hygienist	IV	1	12	$36,000
134	Orlando	Dental Hygienist	IV	1	12	$32,400
135	Orlando	Dental Hygienist	IV	1	12	$34,908
136	Orlando	Dental Hygienist	IV	1	12	$37,488
137	Orlando	Dental Hygienist	IV	1	8	$20,000
138	Orlando	Dental Hygienist	IV	1	12	$34,500
139	Orlando	Dental Hygienist	IV	1	8	$18,000
140	Parris Is	Dental Hygienist	IV	1	7	$21,869
141	Parris Is	Dental Hygienist	IV	1	5	$14,958
142	Pensacola	Dentist	I	1	12	$46,428
143	Pensacola	Dentist	I	1	12	$42,636
144	Pensacola	Dentist	I	1	12	$50,606
145	Pensacola	Dental Hygienist	IV	1	12	$36,000
146	Pensacola	Dental Hygienist	IV	1	12	$30,900
147	Pensacola	Dental Hygienist	IV	1	12	$25,980
148	Pensacola	Dental Hygienist	IV	1	12	$31,240
149	Pensacola	Dental Hygienist	IV	1	12	$37,488
150	Philly	Dentist	I	1	12	$43,936
151	Philly	Dental Hygienist	IV	0.5	12	$18,076
152	Philly	Dental Hygienist	IV	1	4	$12,668
153	Portsmouth	Pharmacist	II	4	12	$220,480
154	Portsmouth	Pharmacist	II	5	12	$245,600
155	Portsmouth	Nurses	III	1	12	$41,600
156	Portsmouth	Nurses	III	39	12	$585,000
157	Portsmouth	Pharmacy Techs	IV	15	6	$246,600
158	Portsmouth	Pharmacy Techs	IV	10	9	$221,520
159	Prt Hueneme	Pharmacist	II	0.2	12	$55,000
160	San Diego	Dentist	I	1	12	$12,821
161	San Diego	Dentist	I	1	4	$10,500
162	San Diego	Dentist	I	1	4	$10,395
163	San Diego	Dentist	I	1	12	$30,720
164	San Diego	Physiologist	I	1	5	$15,600
165	San Diego	Dentist	I	1	12	$32,804
166	San Diego	Dentist	I	1	5	$11,244
167	San Diego	Dentist	I	1	9	$31,500
168	San Diego	Dentist	I	1	12	$26,250
169	San Diego	Dentist	I	1	12	$44,000
170	San Diego	Dentist	I	1	9	$31,682
171	San Diego	Dentist	I	1	12	$34,500
172	San Diego	Dentist	I	0.5	3	$6,600
173	San Diego	Dentist	I	1	12	$32,381
174	San Diego	Dentist	I	1	12	$15,833
175	San Diego	Dentist	I	0.5	12	$12,688

	Location	Profession/Occupation		FTE's	Months	Price
176	San Diego	Dentist	I	1	4	$13,305
177	San Diego	Ped Endocrinologist	I	0.5	12	$25,000
178	San Diego	Dentist	I	1	9	$9,496
179	San Diego	Dentist	I	0.5	12	$6,750
180	San Diego	Dentist	I	1	2	$12,910
181	San Diego	Dentist	I	1	9	$32,667
182	San Diego	OB/GYN	I	1	12	$73,500
183	San Diego	Dentist	I	1	1	$2,357
184	San Diego	Dentist	I	1	4	$14,242
185	San Diego	OB/GYN	I	1	12	$30,600
186	San Diego	Perfusionist	II	2	12	$100,000
187	San Diego	Nurse Anesthetist	II	1	12	$59,000
188	San Diego	Pharmacist	II	5	12	$245,000
189	San Diego	Pediatric Nurse Pr	II	1	12	$54,000
190	San Diego	Nurse Anesthetist	II	1	12	$57,200
191	San Diego	Nurse Anesthetist	II	1	12	$59,000
192	San Diego	Nurses	III	41	12	$1,400,000
193	San Diego	Dental Hygienist	IV	1	12	$43,626
194	San Diego	Dental Hygienist	IV	1	12	$43,626
195	San Diego	Dental Hygienist	IV	1	4	$7,920
196	San Diego	Dental Hygienist	IV	1	12	$32,200
197	San Diego	Dental Hygienist	IV	1	12	$43,626
198	San Diego	Dental Hygienist	IV	1	12	$11,040
199	San Diego	Dental Hygienist	IV	0.5	12	$18,096
200	San Diego	Rad Oncology Tech	IV	1	12	$47,500
201	San Diego	Dental Hygienist	IV	1	12	$33,580
202	San Diego	Radiation Therapy	IV	1	12	$51,000
203	San Diego	Dental Hygienist	IV	1	12	$43,626
204	San Diego	Radiation Therapy	IV	1	12	$51,000
205	San Diego	Dental Hygienist	IV	1	12	$43,626
206	San Diego	Radiation Therapy	IV	2	12	$104,180
207	San Diego	Dental Hygienist	IV	1	5	$6,200
208	San Diego	Ultrasound Tech	IV	2	12	$118,976
209	San Diego	Dental Hygienist	IV	0.5	12	$17,811
210	San Diego	Dental Hygienist	IV	1	8	$13,440
211	San Diego	Dental Hygienist	IV	1	12	$43,626
212	San Diego	Dental Hygienist	IV	1	12	$43,626
213	San Diego	Dental Hygienist	IV	1	12	$43,626
214	San Diego	Dental Hygienist	IV	1	12	$43,626
215	San Diego	Dental Hygienist	IV	1	12	$34,960
216	San Diego	Physiological Tech	IV	1	4.5	$7,650
217	San Fran	Dentist	I	1	12	$50,004
218	San Fran	Dental Hygienist	IV	1	8	$23,010
219	San Fran	Dental Hygienist	IV	1	8	$28,320
220	San Fran	Dental Hygienist	IV	1	8	$28,320
221	San Fran	Dental Hygienist	IV	1	8	$28,320

Total = $27,239,417

APPENDIX B LIST OF PERSONAL SERVICES CONTRACTS BY PROFESSION/OCCUPATION

Doctors

	Location	Profession/Occupation		FTE's	Months	Price	Auth/Month	Total Auth	Difference
1	Bethesda	HIV Internist	I	2	12	$223,255.00	$6,222.39	$149,337.36	($73,917.64)
2	Bethesda	Neuro Radiologist	I	1	12	$259,770.00	$6,222.39	$74,668.68	($185,101.32)
3	Bethesda	Radiologist	I	1	12	$114,000.00	$6,222.39	$74,668.68	($39,331.32)
4	Cp Lejeune	GMO	I	1	6	$29,120.00	$5,880.92	$35,285.52	$6,165.52
5	Groton	GYN	I	1	9	$52,754.00	$6,426.36	$57,837.24	$5,083.24
6	Groton	Pediatrician	I	1	12	$71,923.00	$6,426.36	$77,116.32	$5,193.32
7	Grt Lakes	GMO	I	0.5	12	$7,045.00	$6,329.82	$37,978.92	$30,933.92
8	Millington	Pathologist	I	1	12	$242,000.00	$5,939.12	$71,269.44	($170,730.56)
9	Millington	Psychologist	I	1	12	$66,980.00	$5,939.12	$71,269.44	$4,289.44
10	Orlando	OB/GYN	I	3	12	$500,000.00	$5,975.52	$215,118.72	($284,881.28)
11	Orlando	Pathologist	I	1	12	$229,480.00	$5,975.52	$71,706.24	($157,773.76)
12	San Diego	OB/GYN	I	1	12	$73,500.00	$6,362.08	$76,344.96	$2,844.96
13	San Diego	OB/GYN	I	1	12	$30,600.00	$6,362.08	$76,344.96	$45,744.96
14	San Diego	Ped Endocrinologist	I	0.5	12	$25,000.00	$6,362.08	$36,172.48	$13,172.48
15	San Diego	Physiologist	I	1	5	$15,600.00	$6,362.08	$31,810.40	$16,210.40
		Totals-		17	164	$1,939,027.00	$93,008.23	$1,158,929.36	($780,097.64)
						$10,313.97	$6,220.55	$6,164.52	($4,149.46)

Dentists

	Location	Profession/Occupation		FTE's	Months	Price	Auth/Month	Total Auth	Difference
1	Bethesda	Dentist	I	1	12	$27,900.00	$6,222.39	$74,668.68	$46,768.68
2	Bethesda	Dentist	I	1	12	$42,660.00	$6,222.39	$74,668.68	$32,008.68
3	Bremerton	Dentist	I	1	11	$50,000.00	$6,362.08	$69,982.88	$19,982.88
4	Charleston	Dentist	I	1	12	$47,549.00	$5,920.59	$71,047.08	$23,498.08
5	Grt Lakes	Dentist	I	1	4	$13,600.00	$6,329.82	$25,319.28	$11,719.28
6	Grt Lakes	Dentist	I	1	12	$41,400.00	$6,329.82	$75,957.84	$34,557.84
7	Grt Lakes	Dentist	I	1	4	$13,829.00	$6,329.82	$25,319.28	$11,490.28
8	Grt Lakes	Dentist	I	1	4	$13,833.00	$6,329.82	$25,319.28	$11,486.28
9	Grt Lakes	Dentist	I	1	12	$41,834.00	$6,329.82	$75,957.84	$34,123.84
10	Grt Lakes	Dentist	I	1	12	$41,834.00	$6,329.82	$75,957.84	$34,123.84
11	Grt Lakes	Dentist	I	1	4	$13,996.00	$6,329.82	$25,319.28	$11,323.28
12	Grt Lakes	Dentist	I	1	4	$13,996.00	$6,329.82	$25,319.28	$11,323.28
13	Grt Lakes	Dentist	I	1	4	$14,000.00	$6,329.82	$25,319.28	$11,319.28
14	Grt Lakes	Dentist	I	1	12	$42,068.00	$6,329.82	$75,957.84	$33,889.84
15	Grt Lakes	Dentist	I	1	12	$43,956.00	$6,329.82	$75,957.84	$32,001.84
16	Grt Lakes	Dentist	I	1	12	$43,992.00	$6,329.82	$75,957.84	$31,965.84
17	Grt Lakes	Dentist	I	1	7	$40,468.00	$6,329.82	$44,308.74	$3,840.74
	Location	Profession/Occupation		FTE's	Months	Price	Auth/Month	Total Auth	Difference
18	Grt Lakes	Dentist	I	1	7	$41,364.00	$6,329.82	$44,308.74	$2,944.74
19	Jacks	Dentist	I	2	12	$52,056.00	$6,064.99	$145,559.76	$93,503.76
20	Jacks	Dentist	I	1	11	$45,303.00	$6,064.99	$66,714.89	$21,411.89
21	Jacks	Dentist	I	1	12	$50,457.00	$6,064.99	$72,779.88	$22,322.88
22	Long Beach	Dentist	I	1	12	$47,760.00	$6,348.43	$76,181.16	$28,421.16
23	Newport	Dentist	I	1	11	$44,000.00	$5,962.17	$65,583.87	$21,583.87
24	Newport	Dentist	I	1	8	$39,872.00	$5,962.17	$47,697.36	$7,825.36
25	Newport	Dentist	I	1	8	$42,656.00	$5,962.17	$47,697.36	$5,041.36
26	Newport	Dentist	I	1	7	$46,940.00	$5,962.17	$41,735.19	($5,204.81)
27	Norfolk	Dentist	I	1	12	$35,200.00	$6,046.07	$72,552.84	$37,352.84
28	Norfolk	Dentist	I	1	12	$35,244.00	$6,046.07	$72,552.84	$37,308.84
29	Norfolk	Dentist	I	1	12	$38,500.00	$6,046.07	$72,552.84	$34,052.84
30	Norfolk	Dentist	I	1	12	$39,996.00	$6,046.07	$72,552.84	$32,556.84
31	Norfolk	Dentist	I	1	12	$41,000.00	$6,046.07	$72,552.84	$31,552.84
32	Norfolk	Dentist	I	1	12	$41,000.00	$6,046.07	$72,552.84	$31,552.84
33	Norfolk	Dentist	I	1	12	$42,996.00	$6,046.07	$72,552.84	$29,556.84
34	Norfolk	Dentist	I	1	12	$43,200.00	$6,046.07	$72,552.84	$29,352.84
35	Norfolk	Dentist	I	1	12	$45,088.00	$6,046.07	$72,552.84	$27,464.84
36	Orlando	Dentist	I	1	12	$42,000.00	$5,975.52	$71,706.24	$29,706.24
37	Orlando	Dentist	I	1	12	$48,000.00	$5,975.52	$71,706.24	$23,706.24
38	Orlando	Dentist	I	1	12	$48,000.00	$5,975.52	$71,706.24	$23,706.24
39	Orlando	Dentist	I	1	12	$50,400.00	$5,975.52	$71,706.24	$21,306.24
40	Orlando	Dentist	I	1	7	$29,850.00	$5,975.52	$41,828.64	$11,978.64
41	Orlando	Dentist	I	1	12	$52,656.00	$5,975.52	$71,706.24	$19,050.24
42	Pensacola	Dentist	I	1	12	$42,436.00	$5,892.53	$70,734.36	$28,298.36
43	Pensacola	Dentist	I	1	12	$46,428.00	$5,892.53	$70,734.36	$24,306.36
44	Pensacola	Dentist	I	1	12	$50,604.00	$5,892.53	$70,734.36	$20,130.36
45	Philly	Dentist	I	1	12	$43,936.00	$6,215.44	$74,585.28	$30,649.28
46	San Diego	Dentist	I	1	9	$2,496.00	$6,362.08	$57,258.72	$54,762.72
47	San Diego	Dentist	I	1	12	$12,821.00	$6,362.08	$76,344.96	$63,523.96

48	San Diego	Dentist	I	0.5	12	$6,750.00	$6,362.08	$38,172.48	$31,422.48
49	San Diego	Dentist	I	1	12	$15,833.00	$6,362.08	$76,344.96	$60,511.96
50	San Diego	Dentist	I	0.5	12	$12,688.00	$6,362.08	$38,172.48	$25,484.48
51	San Diego	Dentist	I	1	12	$26,250.00	$6,362.08	$76,344.96	$50,094.96
52	San Diego	Dentist	I	1	5	$11,244.00	$6,362.08	$31,810.40	$20,566.40
53	San Diego	Dentist	I	1	1	$2,357.00	$6,362.08	$6,362.08	$4,005.08
54	San Diego	Dentist	I	1	12	$30,720.00	$6,362.08	$76,344.96	$45,624.96
55	San Diego	Dentist	I	1	4	$10,395.00	$6,362.08	$25,448.32	$15,053.32
56	San Diego	Dentist	I	1	4	$10,500.00	$6,362.08	$25,448.32	$14,948.32
57	San Diego	Dentist	I	1	12	$32,381.00	$6,362.08	$76,344.96	$43,963.96
58	San Diego	Dentist	I	1	12	$32,804.00	$6,362.08	$76,344.96	$43,540.96
59	San Diego	Dentist	I	1	12	$34,500.00	$6,362.08	$76,344.96	$41,844.96
60	San Diego	Dentist	I	1	4	$13,305.00	$6,362.08	$25,448.32	$12,143.32
61	San Diego	Dentist	I	1	9	$31,500.00	$6,362.08	$57,258.72	$25,758.72
62	San Diego	Dentist	I	1	9	$31,682.00	$6,362.08	$57,258.72	$25,576.72
63	San Diego	Dentist	I	1	4	$14,242.00	$6,362.08	$25,448.32	$11,206.32
64	San Diego	Dentist	I	1	9	$32,667.00	$6,362.08	$57,258.72	$24,591.72
65	San Diego	Dentist	I	1	12	$44,000.00	$6,362.08	$76,344.96	$32,344.96
66	San Diego	Dentist	I	0.5	3	$6,600.00	$6,362.08	$9,543.12	$2,943.12
	Location	Profession/Occupation		FTE's	Months	Price	Auth/Month	Total Auth	Difference
67	San Diego	Dentist	I	1	2	$12,910.00	$6,362.08	$12,724.16	($185.84)
68	San Fran	Dentist	I	1	12	$50,004.00	$6,426.36	$77,116.32	$27,112.32
		Totals	=	67.5	656	$2,257,728.00	$422,210.91	$4,046,389.63	$1,788,661.63
		Weighted average	=			$3,449.55	$6,210.45	$6,182.41	$2,732.87

Other Professionals

	Location	Profession/Occupation		FTE's	Months	Price	Auth/Month	Total Auth	Difference
1	Barstow	Optometrist	II	0.1	12	$13,848.00	$4,857.78	$5,829.34	($8,018.66)
2	Bethesda	Pharmacist	II	6	12	$337,334.00	$5,156.44	$371,263.68	$33,929.68
3	Bethesda	Psychologist	II	1	12	$42,849.00	$5,156.44	$61,877.28	$19,028.28
4	Camp Pend	Pharmacist	II	1	12	$56,680.00	$5,116.37	$61,396.44	$4,716.44
5	Camp Pend	Speech Pathologist	II	1	12	$38,400.00	$5,116.37	$61,396.44	$22,996.44
6	Groton	Pharmacist	II	1	10	$35,891.00	$5,336.65	$53,366.50	$17,475.50
7	Grt Lakes	Nurse Practitioner	II	1	12	$66,543.00	$5,282.63	$63,391.56	($3,151.44)
8	Jacks	Pharmacist	II	1	12	$51,360.00	$4,989.32	$59,871.84	$8,511.84
9	Oakland	Pharmacist	II	3	12	$160,555.00	$5,282.63	$190,174.68	$29,619.68
10	Portsmouth	Pharmacist	II	5	12	$245,500.00	$4,942.59	$296,555.40	$50,955.40
11	Portsmouth	Pharmacist	II	4	12	$220,480.00	$4,942.59	$237,244.32	$16,764.32
12	Prt Hueneme	Pharmacist	II	0.2	12	$55,000.00	$5,225.82	$12,541.97	($42,458.03)
13	San Diego	Nurse Anesthetist	II	1	12	$57,200.00	$5,253.44	$63,041.28	$5,841.28
14	San Diego	Nurse Anesthetist	II	1	12	$59,000.00	$5,253.44	$63,041.28	$4,041.28
15	San Diego	Nurse Anesthetist	II	1	12	$59,000.00	$5,253.44	$63,041.28	$4,041.28
16	San Diego	Pediatric Nurse Pr	II	1	12	$54,000.00	$5,253.44	$63,041.28	$9,041.28
17	San Diego	Perfusionist	II	2	12	$100,000.00	$5,253.44	$126,082.56	$26,082.56
18	San Diego	Pharmacist	II	5	12	$245,000.00	$5,253.44	$315,206.40	$70,206.40
		Totals	=	35.3	214	$1,898,740.00	$92,926.27	$2,168,363.52	$269,623.52
		Weighted average	=			$4,083.33	$5,162.57	$5,252.44	$1,170.11

Registered Nurses

	Location	Profession/Occupation		FTE's	Months	Price	Auth/Month	Total Auth	Difference
1	Bethesda	Nurses	III	1.8	12	$123,940.00	$4,427.24	$95,628.38	($28,311.62)
2	Bethesda	Nurses	III	4	12	$279,469.00	$4,427.24	$212,507.52	($66,961.48)
3	Bethesda	Nurses	III	4.2	12	$294,248.00	$4,427.24	$223,132.90	($71,115.10)
4	Bethesda	Nurses	III	5.6	12	$392,331.00	$4,427.24	$297,510.53	($94,820.47)
5	Bethesda	Nurses	III	5.6	12	$392,331.00	$4,427.24	$297,510.53	($94,820.47)
6	Bethesda	Nurses	III	6	12	$420,547.00	$4,427.24	$318,761.28	($101,785.72)
7	Bethesda	Nurses	III	7	12	$489,100.00	$4,427.24	$371,888.16	($117,211.84)
8	Bethesda	Nurses	III	12.6	12	$882,745.00	$4,427.24	$669,398.69	($213,346.31)
9	Bethesda	Nurses	III	23	12	$1,596,652.00	$4,427.24	$1,221,918.24	($374,733.76)
	Location	Profession/Occupation		FTE's	Months	Price	Auth/Month	Total Auth	Difference
10	Oakland	Nurses	III	7	12	$531,596.00	$4,518.55	$379,558.20	($152,037.80)
11	Oakland	Nurses	III	9	12	$687,657.00	$4,518.55	$488,003.40	($199,653.60)
12	Oakland	Nurses	III	30	12	$2,905,736.00	$4,518.55	$1,626,678.00	($1,279,058.00)
13	Oakland	Nurses	III	31	12	$2,565,525.00	$4,518.55	$1,680,900.60	($884,624.40)
14	Oakland	Nurses	III	58.8	12	$2,696,358.00	$4,518.55	$3,188,288.88	$491,930.88
15	Portsmouth	Nurses	III	1	12	$41,600.00	$4,239.28	$50,871.36	$9,271.36
16	Portsmouth	Nurses	III	39	12	$585,000.00	$4,239.28	$1,983,983.04	$1,398,983.04
17	San Diego	Nurses	III	41	12	$1,400,000.00	$4,457.24	$2,192,962.08	$792,962.08
		Totals	=	286.6	204	$16,284,835.00	$75,373.71	$15,299,501.78	($985,333.22)
		Weighted average	=			$4,735.06	$4,433.75	$4,448.56	($286.50)

Paraprofessionals

	Location	Profession/Occupation		FTE's	Months	Price	Auth/Month	Total Auth	Difference
1	Bethesda	Angiographer	IV	1	12	$309,950.00	$3,494.04	$41,928.48	($268,021.52)
3	Bethesda	CT Techs	IV	4	12	$168,300.00	$3,494.04	$167,713.92	($586.08)
2	Bethesda	Resp Tech	IV	7	12	$481,435.00	$3,494.04	$293,499.36	($187,935.64)
4	Bethesda	X-Ray Techs	IV	4	12	$94,000.00	$3,494.04	$167,713.92	$73,713.92
5	Camp Pend	CAT Tech	IV	1	3	$48,000.00	$3,442.62	$10,327.86	($37,672.14)
6	Camp Pend	CAT Tech	IV	1	12	$21,250.00	$3,442.62	$41,311.44	$20,061.44
7	Camp Pend	US Tech	IV	1	5	$9,250.00	$3,442.62	$17,213.10	$7,963.10
8	Jacks	Pharm Tech	IV	1	12	$25,689.00	$3,317.06	$39,804.72	$14,115.72
9	Oakland	Rad Therapist	IV	2	9	$67,307.00	$3,539.94	$63,718.92	($3,588.08)
10	Portsmouth	Pharm Techs	IV	10	9	$221,520.00	$3,330.12	$299,710.80	$78,190.80
13	Portsmouth	Pharm Techs	IV	15	6	$246,600.00	$3,330.12	$299,710.80	$53,110.80
12	San Diego	Physiology Tech	IV	1	4.5	$7,650.00	$3,485.34	$15,684.03	$8,034.03
11	San Diego	Rad Oncology Tech	IV	1	12	$47,500.00	$3,485.34	$41,824.08	($5,675.92)
14	San Diego	Rad Therapy Tech	IV	1	12	$51,000.00	$3,485.34	$41,824.08	($9,175.92)
15	San Diego	Rad Therapy Tech	IV	2	12	$104,180.00	$3,485.34	$83,648.16	($20,531.84)
16	San Diego	Rad Therapy Tech	IV	1	12	$51,000.00	$3,485.34	$41,824.08	($9,175.92)
17	San Diego	US Tech	IV	2	12	$118,976.00	$3,485.34	$83,648.16	($35,327.84)
		Totals	=	55	168.5	$2,073,607.00	$58,733.30	$1,751,105.91	($322,501.09)
		Weighted average	=			$4,061.91	$3,454.90	$3,430.18	($631.74)

Dental Hygienists

	Location	Profession/Occupation		FTE's	Months	Price	Auth/Month	Total Auth	Difference
1	Bethesda	Dental Hygienist	IV	1	12	$37,020.00	$3,494.04	$41,928.48	$4,908.48
2	Bethesda	Dental Hygienist	IV	1	12	$41,112.00	$3,494.04	$41,928.48	$816.48
3	Bethesda	Dental Hygienist	IV	1	12	$40,000.00	$3,494.04	$41,928.48	$1,928.48
4	Bethesda	Dental Hygienist	IV	1	12	$39,000.00	$3,494.04	$41,928.48	$2,928.48
	Location	Profession/Occupation		FTE's	Months	Price	Auth/Month	Total Auth	Difference
5	Bremerton	Dental Hygienist	IV	1	12	$36,000.00	$3,485.34	$41,824.08	$5,824.08
6	Bremerton	Dental Hygienist	IV	1	12	$44,784.00	$3,485.34	$41,824.08	($2,959.92)
7	Bremerton	Dental Hygienist	IV	1	12	$46,020.00	$3,485.34	$41,824.08	($4,195.92)
8	Bremerton	Dental Hygienist	IV	1	12	$44,784.00	$3,485.34	$41,824.08	($2,959.92)
9	Bremerton	Dental Hygienist	IV	1	12	$45,108.00	$3,485.34	$41,824.08	($3,283.92)
10	Cp Lejeune	Dental Hygienist	IV	1	12	$30,000.00	$3,176.74	$38,120.88	$8,120.88
11	Grt Lakes	Dental Hygienist	IV	0.5	12	$18,689.00	$3,539.94	$21,239.64	$2,550.64
12	Grt Lakes	Dental Hygienist	IV	0.5	12	$22,714.00	$3,539.94	$21,239.64	($1,474.36)
13	Grt Lakes	Dental Hygienist	IV	1	12	$37,378.00	$3,539.94	$42,479.28	$5,101.28
14	Grt Lakes	Dental Hygienist	IV	1	12	$35,400.00	$3,539.94	$42,479.28	$7,079.28
15	Grt Lakes	Dental Hygienist	IV	1	8	$32,305.00	$3,539.94	$28,319.52	($3,985.48)
16	Grt Lakes	Dental Hygienist	IV	1	12	$29,700.00	$3,539.94	$42,479.28	$12,779.28
17	Grt Lakes	Dental Hygienist	IV	1	12	$37,378.00	$3,539.94	$42,479.28	$5,101.28
18	Grt Lakes	Dental Hygienist	IV	1	12	$35,640.00	$3,539.94	$42,479.28	$6,839.28
19	Grt Lakes	Dental Hygienist	IV	1	12	$33,280.00	$3,539.94	$42,479.28	$9,199.28
20	Grt Lakes	Dental Hygienist	IV	1	12	$36,750.00	$3,539.94	$42,479.28	$5,729.28
21	Jacks	Dental Hygienist	IV	0.5	12	$18,000.00	$3,317.06	$19,902.36	$1,902.36
22	Jacks	Dental Hygienist	IV	1	9	$27,600.00	$3,317.06	$29,853.54	$2,253.54
23	Jacks	Dental Hygienist	IV	1	12	$35,400.00	$3,317.06	$39,804.72	$4,404.72
24	Long Beach	Dental Hygienist	IV	1	12	$43,626.00	$3,561.70	$42,740.40	($885.60)
25	Long Beach	Dental Hygienist	IV	1	12	$43,626.00	$3,561.70	$42,740.40	($885.60)
26	Newport	Dental Hygienist	IV	0.6	6	$6,116.00	$3,234.64	$11,644.70	$5,528.70
27	Norfolk	Dental Hygienist	IV	1	12	$36,400.00	$3,330.12	$39,961.44	$3,561.44
28	Norfolk	Dental Hygienist	IV	1	12	$37,200.00	$3,330.12	$39,961.44	$2,761.44
29	Norfolk	Dental Hygienist	IV	1	12	$36,000.00	$3,330.12	$39,961.44	$3,961.44
30	Norfolk	Dental Hygienist	IV	1	12	$37,200.00	$3,330.12	$39,961.44	$2,761.44
31	Norfolk	Dental Hygienist	IV	1	12	$37,200.00	$3,330.12	$39,961.44	$2,761.44
32	Norfolk	Dental Hygienist	IV	1	12	$37,200.00	$3,330.12	$39,961.44	$2,761.44
33	Norfolk	Dental Hygienist	IV	1	12	$36,000.00	$3,330.12	$39,961.44	$3,961.44
34	Norfolk	Dental Hygienist	IV	1	12	$37,200.00	$3,330.12	$39,961.44	$2,761.44
35	Norfolk	Dental Hygienist	IV	1	12	$36,900.00	$3,330.12	$39,961.44	$3,061.44
36	Norfolk	Dental Hygienist	IV	1	12	$34,500.00	$3,330.12	$39,961.44	$5,461.44
37	Norfolk	Dental Hygienist	IV	1	12	$29,400.00	$3,330.12	$39,961.44	$10,561.44
38	Norfolk	Dental Hygienist	IV	1	12	$37,200.00	$3,330.12	$39,961.44	$2,761.44
39	Norfolk	Dental Hygienist	IV	1	12	$37,200.00	$3,330.12	$39,961.44	$2,761.44
40	Norfolk	Dental Hygienist	IV	1	12	$33,804.00	$3,330.12	$39,961.44	$6,157.44
41	Norfolk	Dental Hygienist	IV	1	12	$37,200.00	$3,330.12	$39,961.44	$2,761.44
42	Norfolk	Dental Hygienist	IV	1	12	$37,200.00	$3,330.12	$39,961.44	$2,761.44
43	Norfolk	Dental Hygienist	IV	1	12	$32,400.00	$3,330.12	$39,961.44	$7,561.44
44	Norfolk	Dental Hygienist	IV	1	12	$30,000.00	$3,330.12	$39,961.44	$9,961.44
45	Norfolk	Dental Hygienist	IV	1	12	$37,200.00	$3,330.12	$39,961.44	$2,761.44
46	Norfolk	Dental Hygienist	IV	1	12	$29,500.00	$3,330.12	$39,961.44	$10,461.44
47	Norfolk	Dental Hygienist	IV	1	12	$34,500.00	$3,330.12	$39,961.44	$5,461.44
48	Oakland	Dental Hygienist	IV	1	8	$28,320.00	$3,539.94	$28,319.52	($0.48)
49	Orlando	Dental Hygienist	IV	1	12	$32,400.00	$3,237.95	$38,855.40	$6,455.40
50	Orlando	Dental Hygienist	IV	1	8	$20,000.00	$3,237.95	$25,903.60	$5,903.60
51	Orlando	Dental Hygienist	IV	1	8	$18,000.00	$3,237.95	$25,903.60	$7,903.60
52	Orlando	Dental Hygienist	IV	1	12	$37,488.00	$3,237.95	$38,855.40	$1,367.40
53	Orlando	Dental Hygienist	IV	1	12	$34,908.00	$3,237.95	$38,855.40	$3,947.40

	Location	Profession/Occupation		FTE's	Months	Price	Auth/Month	Total Auth	Difference
54	Orlando	Dental Hygienist	IV	1	12	$34,500.00	$3,237.95	$38,855.40	$4,355.40
55	Orlando	Dental Hygienist	IV	1	12	$36,000.00	$3,237.95	$38,855.40	$2,855.40
56	Parris Is	Dental Hygienist	IV	1	5	$14,958.00	$3,330.12	$16,650.60	$1,692.60
57	Parris Is	Dental Hygienist	IV	1	7	$21,869.00	$3,330.12	$23,310.84	$1,441.84
58	Pensacola	Dental Hygienist	IV	1	12	$25,980.00	$3,202.89	$38,434.68	$12,454.68
59	Pensacola	Dental Hygienist	IV	1	12	$36,000.00	$3,202.89	$38,434.68	$2,434.68
60	Pensacola	Dental Hygienist	IV	1	12	$37,488.00	$3,202.89	$38,434.68	$946.68
61	Pensacola	Dental Hygienist	IV	1	12	$30,900.00	$3,202.89	$38,434.68	$7,534.68
62	Pensacola	Dental Hygienist	IV	1	12	$31,240.00	$3,202.89	$38,434.68	$7,194.68
63	Philly	Dental Hygienist	IV	0.5	12	$18,076.00	$3,442.62	$20,655.72	$2,579.72
64	Philly	Dental Hygienist	IV	1	4	$12,668.00	$3,442.62	$13,770.48	$1,102.48
65	San Diego	Dental Hygienist	IV	0.5	12	$18,096.00	$3,485.34	$20,912.04	$2,816.04
66	San Diego	Dental Hygienist	IV	0.5	12	$17,811.00	$3,485.34	$20,912.04	$3,101.04
67	San Diego	Dental Hygienist	IV	1	12	$32,200.00	$3,485.34	$41,824.08	$9,624.08
68	San Diego	Dental Hygienist	IV	1	12	$43,626.00	$3,485.34	$41,824.08	($1,801.92)
69	San Diego	Dental Hygienist	IV	1	12	$43,626.00	$3,485.34	$41,824.08	($1,801.92)
70	San Diego	Dental Hygienist	IV	1	5	$6,200.00	$3,485.34	$17,426.70	$11,226.70
71	San Diego	Dental Hygienist	IV	1	12	$33,580.00	$3,485.34	$41,824.08	$8,244.08
72	San Diego	Dental Hygienist	IV	1	4	$7,920.00	$3,485.34	$13,941.36	$6,021.36
73	San Diego	Dental Hygienist	IV	1	12	$43,626.00	$3,485.34	$41,824.08	($1,801.92)
74	San Diego	Dental Hygienist	IV	1	12	$43,626.00	$3,485.34	$41,824.08	($1,801.92)
75	San Diego	Dental Hygienist	IV	1	12	$11,040.00	$3,485.34	$41,824.08	$30,784.08
76	San Diego	Dental Hygienist	IV	1	12	$43,626.00	$3,485.34	$41,824.08	($1,801.92)
77	San Diego	Dental Hygienist	IV	1	12	$34,960.00	$3,485.34	$41,824.08	$6,864.08
78	San Diego	Dental Hygienist	IV	1	12	$43,626.00	$3,485.34	$41,824.08	($1,801.92)
79	San Diego	Dental Hygienist	IV	1	12	$43,626.00	$3,485.34	$41,824.08	($1,801.92)
80	San Diego	Dental Hygienist	IV	1	12	$43,626.00	$3,485.34	$41,824.08	($1,801.92)
81	San Diego	Dental Hygienist	IV	1	8	$13,440.00	$3,485.34	$27,882.72	$14,442.72
82	San Diego	Dental Hygienist	IV	1	12	$43,626.00	$3,485.34	$41,824.08	($1,801.92)
83	San Fran	Dental Hygienist	IV	1	8	$28,320.00	$3,680.38	$29,443.04	$1,123.04
84	San Fran	Dental Hygienist	IV	1	8	$28,320.00	$3,680.38	$29,443.04	$1,123.04
85	San Fran	Dental Hygienist	IV	1	8	$28,320.00	$3,680.38	$29,443.04	$1,123.04
86	San Fran	Dental Hygienist	IV	1	8	$23,010.00	$3,680.38	$29,443.04	$6,433.04
		Totals	=	82.6	952	$2,785,480.00	$293,443.90	$3,112,510.14	$327,030.14
		Weighted average	=			$3,048.91	$3,412.14	$3,406.86	$357.96
	Overall Totals		=	544		$27,239,417.00	$1,035,796.32	$27,536,800.35	$297,383.35
		Weighted average	=			$4,445.51	$4,686.86	$4,494.04	$48.53

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